FIG.1
PRIOR ART

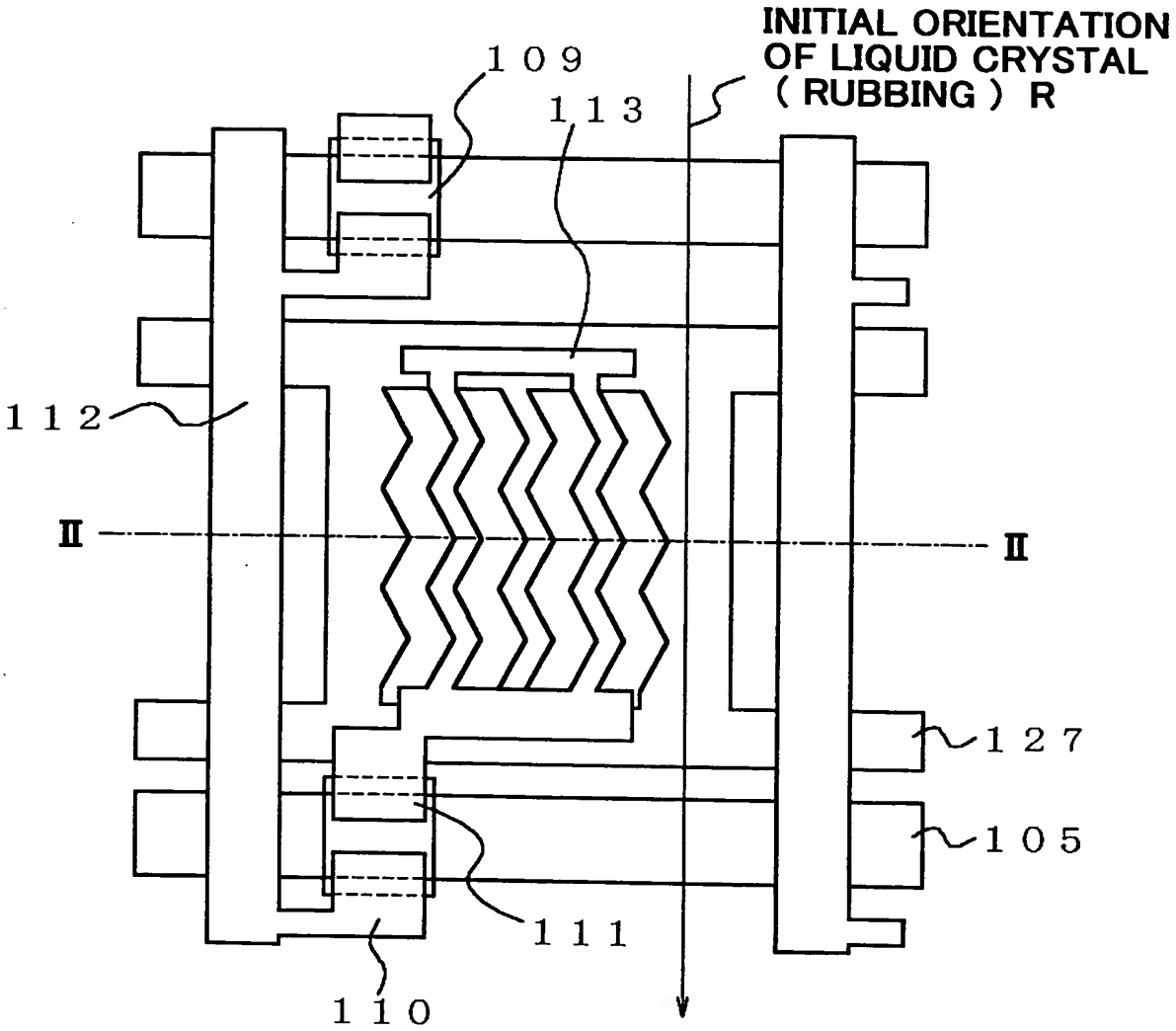


FIG.2
PRIOR ART

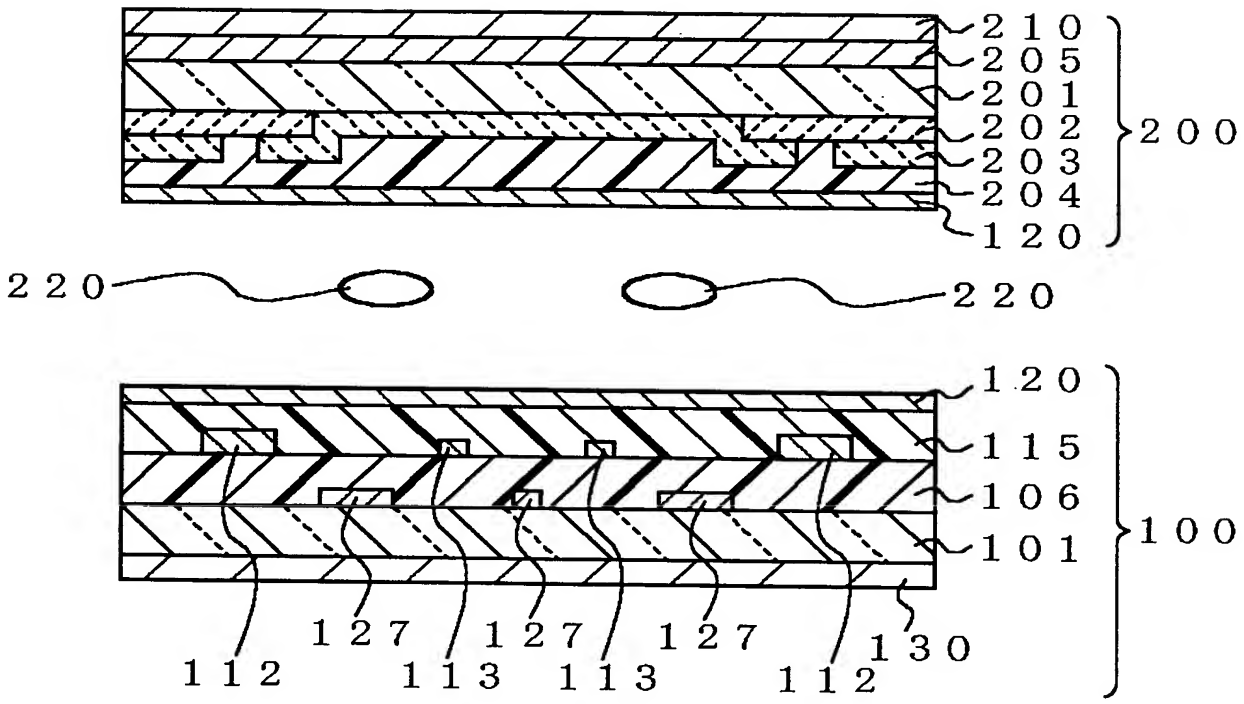


FIG.3

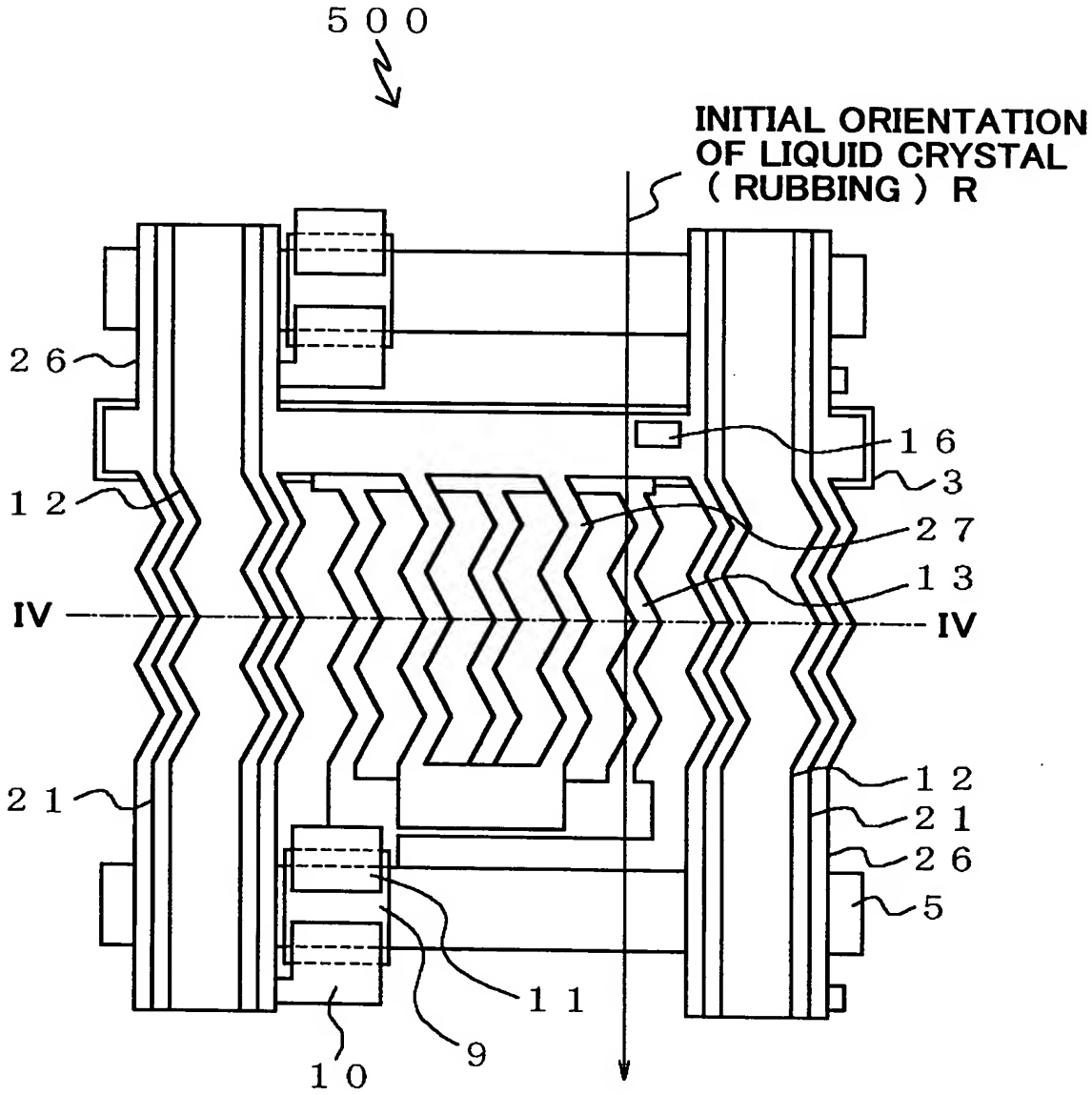

500
INITIAL ORIENTATION
OF LIQUID CRYSTAL
(RUBBING) R
26
12
IV
21
16
3
27
13
IV
12
21
26
5
11
9
10

FIG.4

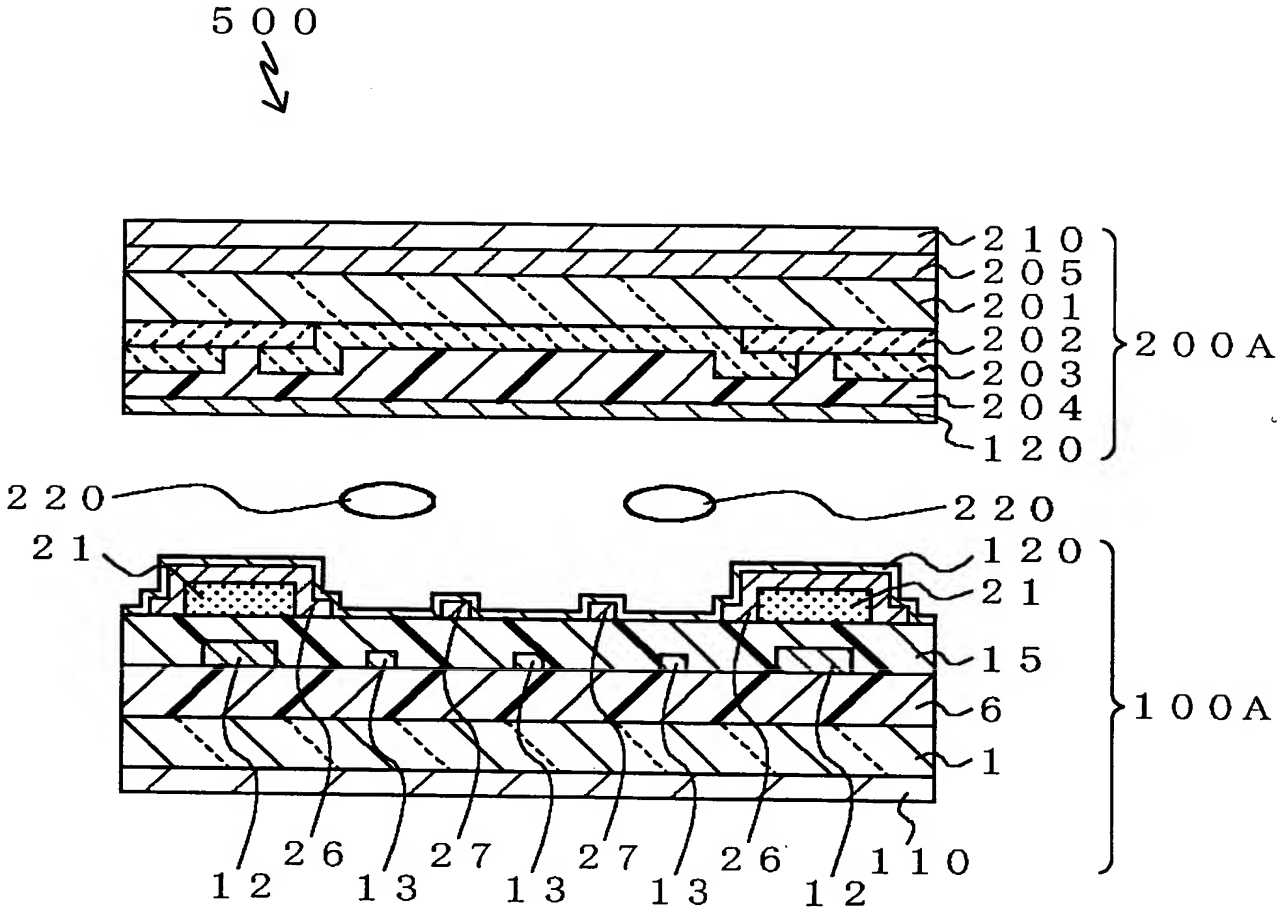

500
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
12
26
13
27
13
27
13
26
12
110

FIG.5A

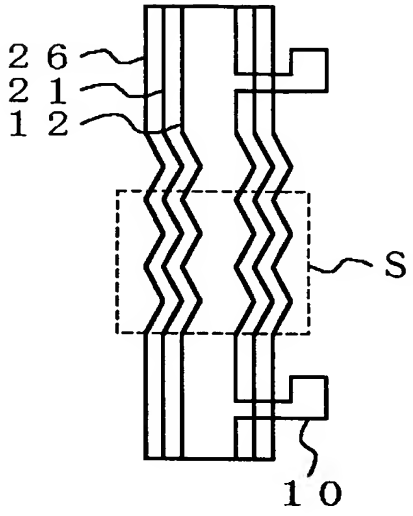


FIG.5B

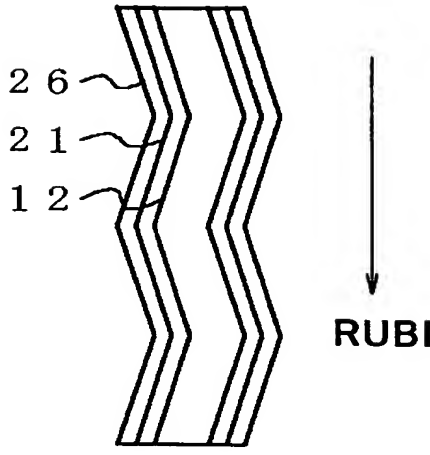


FIG.5C

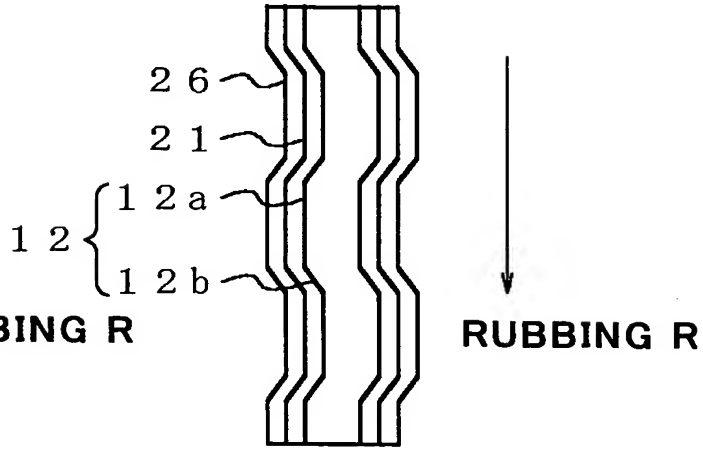


FIG.6

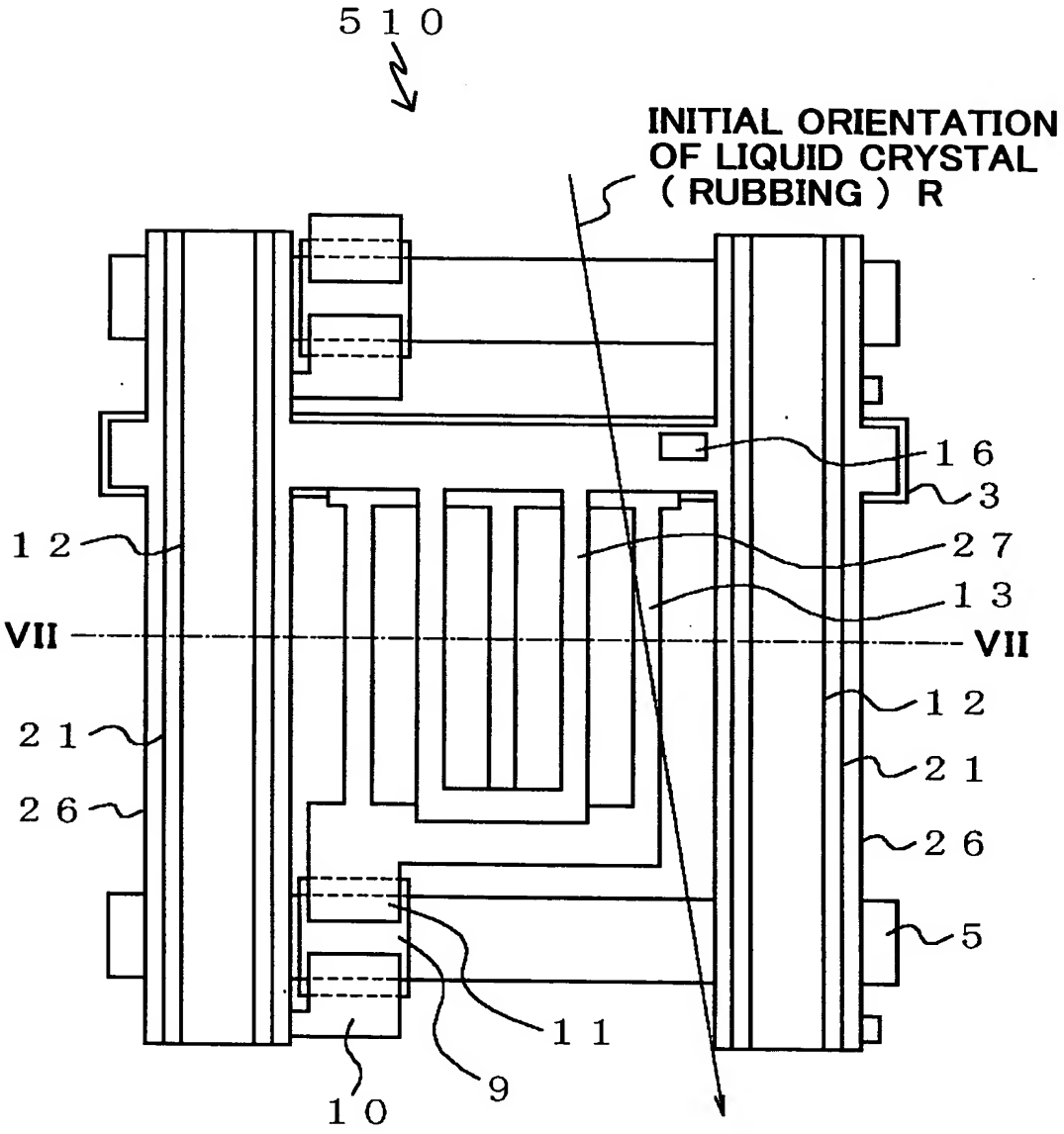

510
INITIAL ORIENTATION
OF LIQUID CRYSTAL
(RUBBING) R
16
3
12
27
13
VII
VII
12
21
21
26
26
5
11
9
10

FIG.7

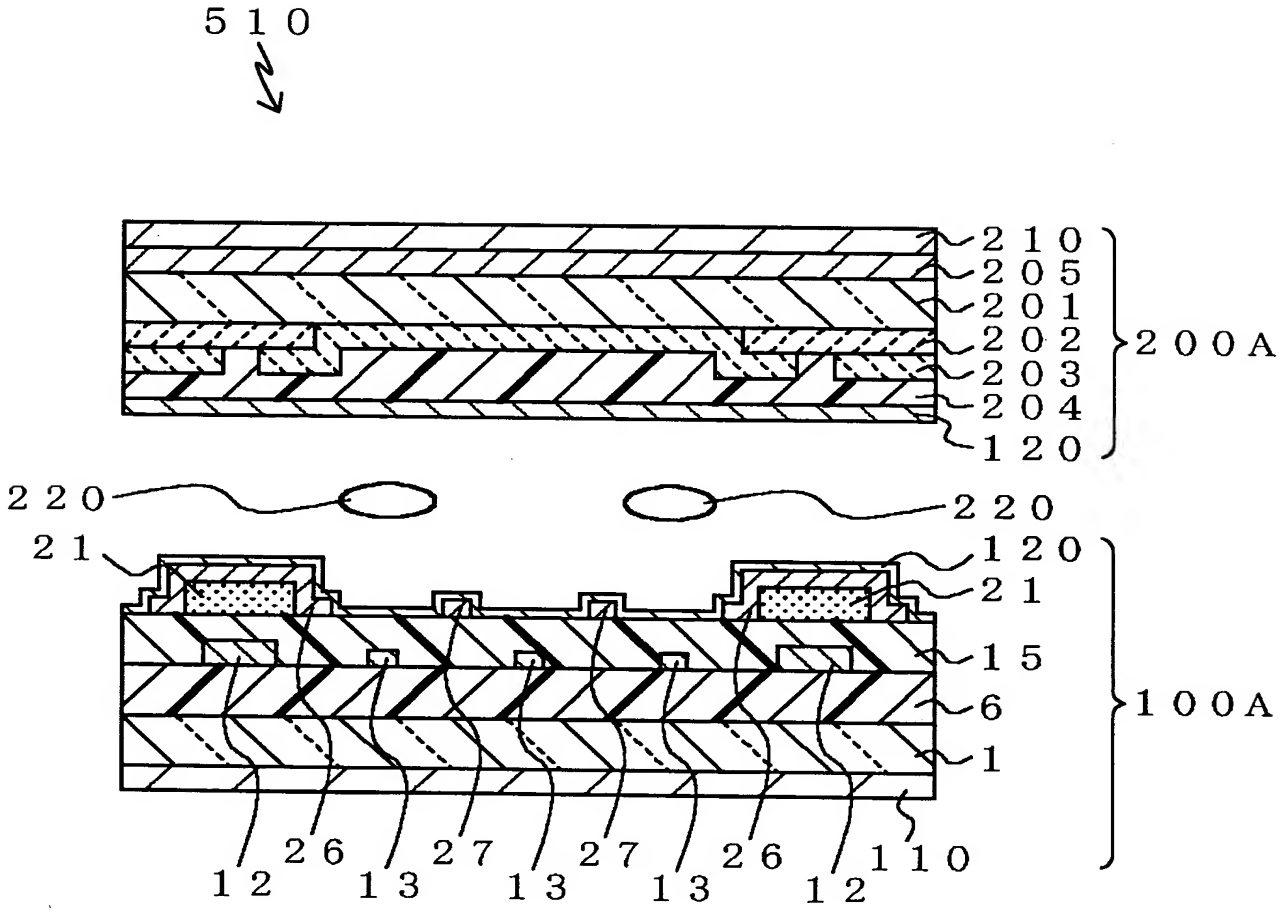

510
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
12
26
13
27
13
27
13
26
12
110

FIG.8

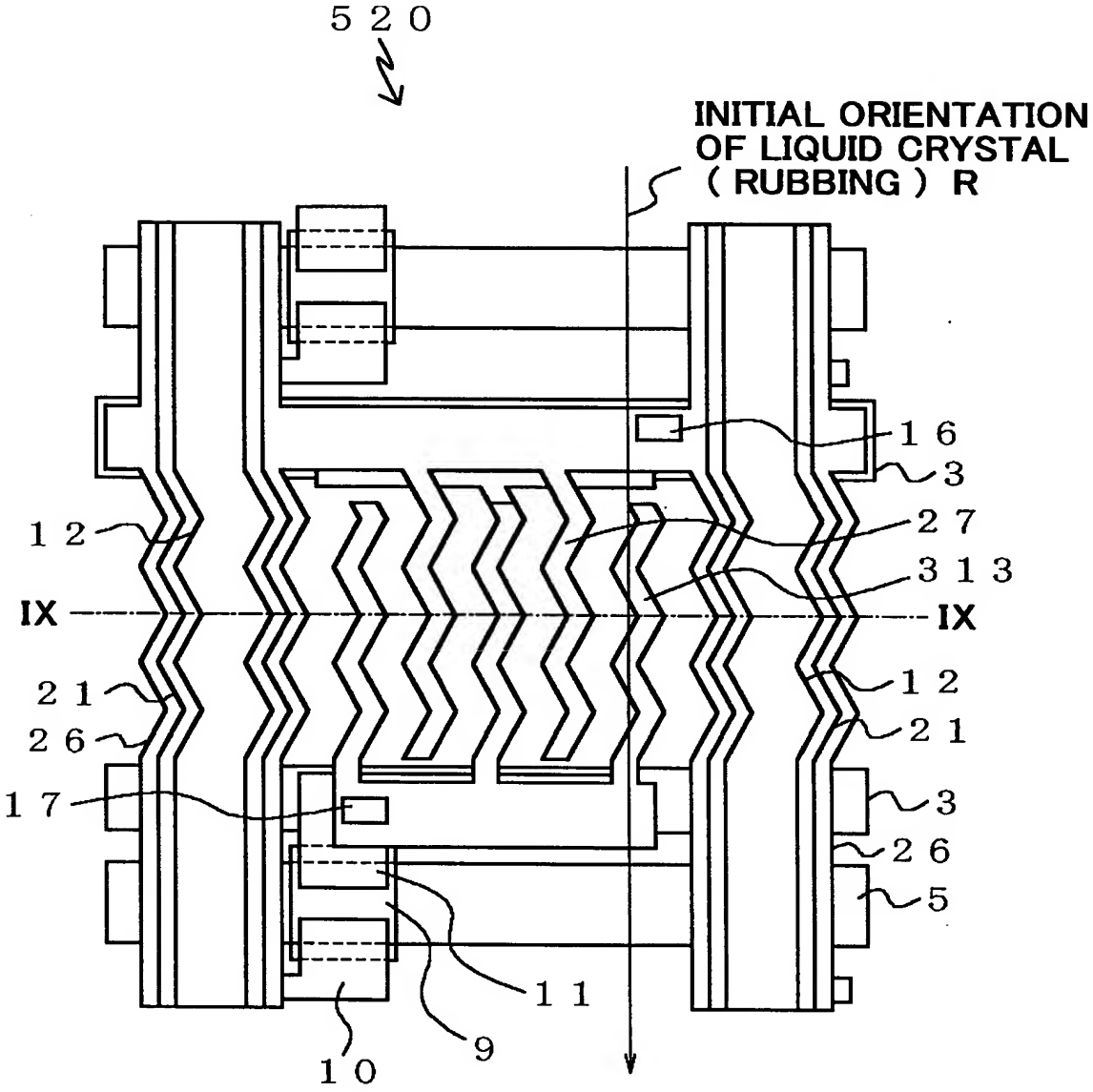

520
INITIAL ORIENTATION
OF LIQUID CRYSTAL
(RUBBING) R
16
3
27
313
IX
IX
12
21
26
17
3
26
5
11
9
10

FIG.9

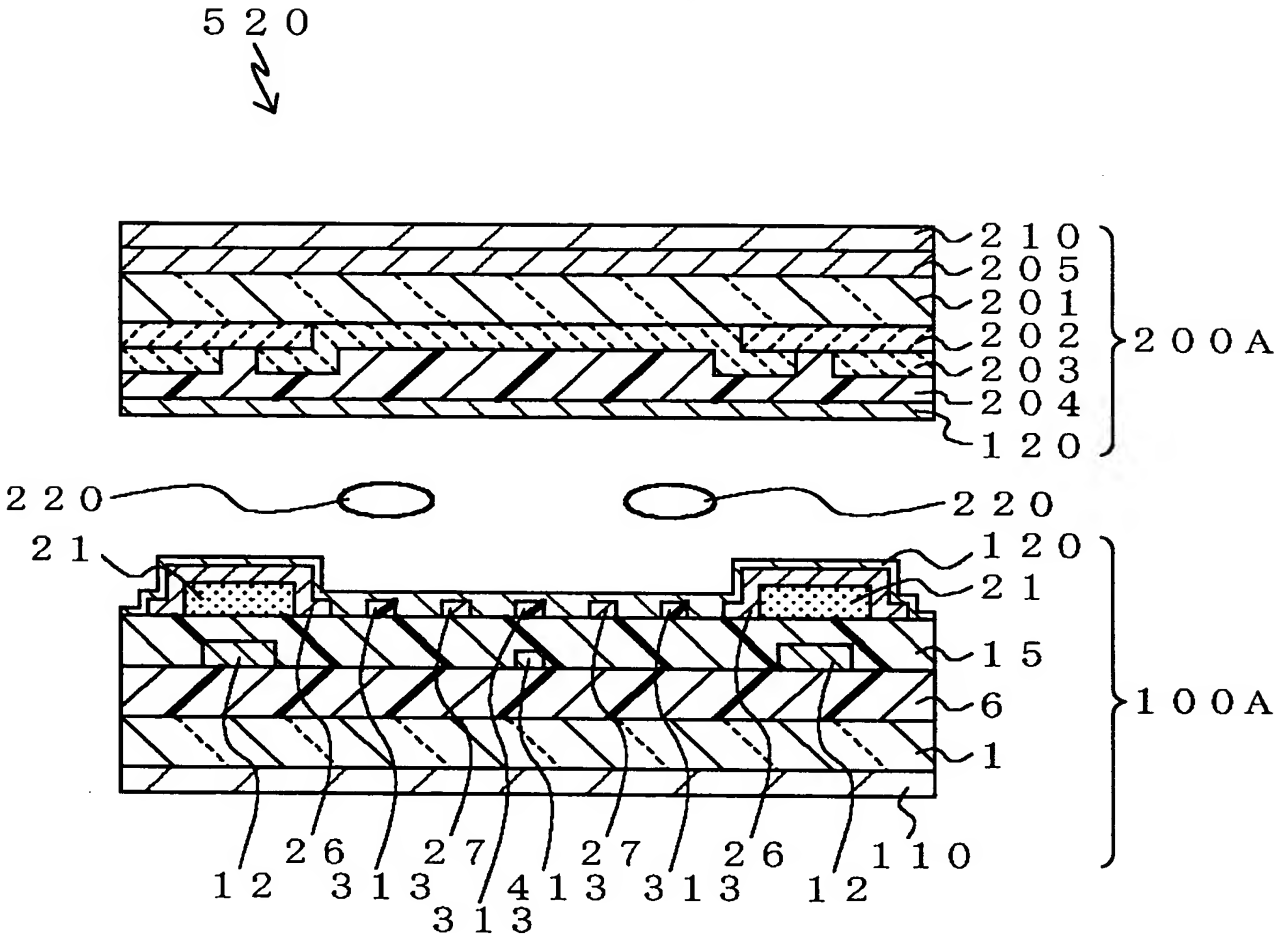

520
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
12
26
313
27
313
27
413
26
313
12
110

FIG.10

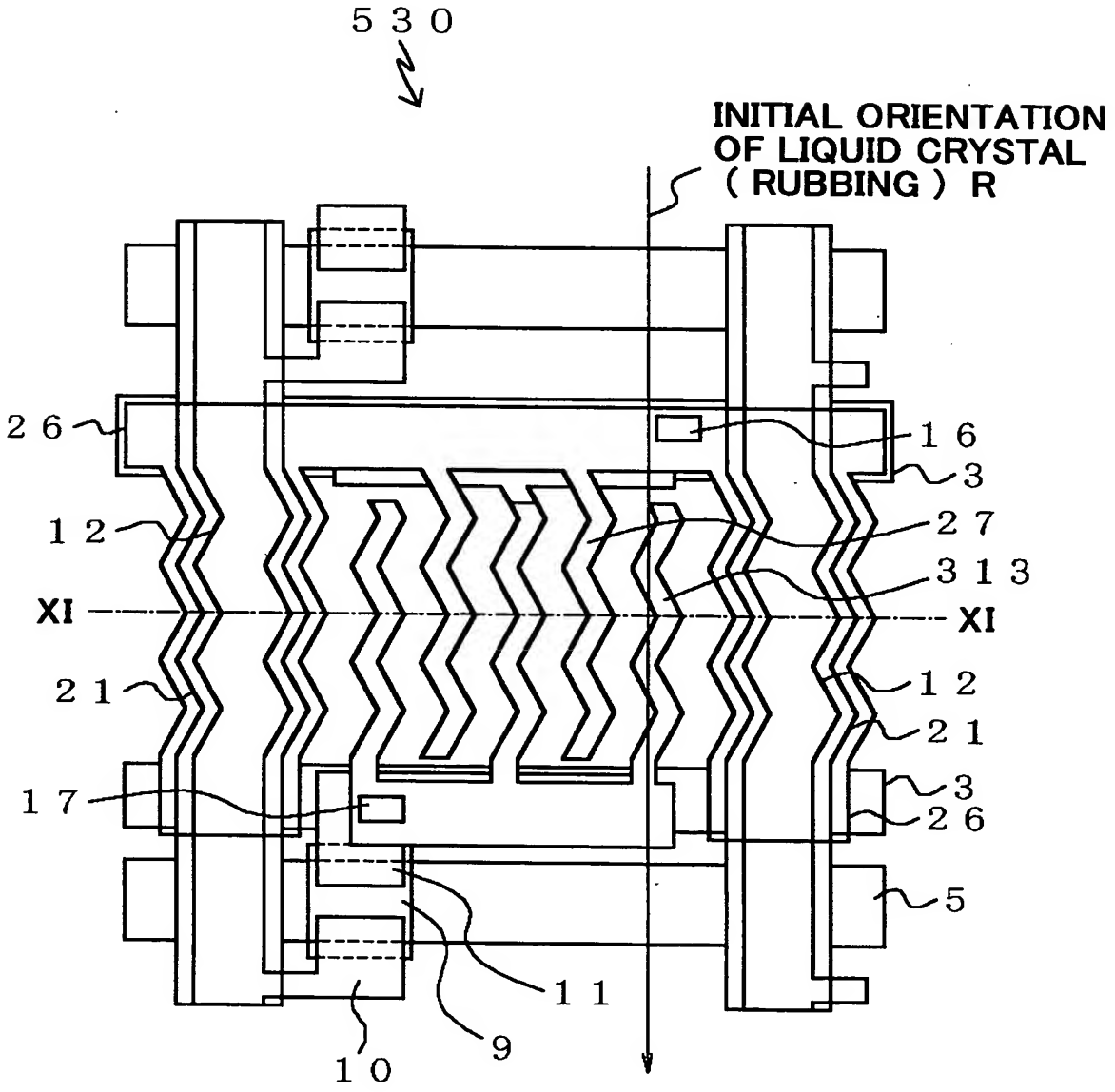

530
INITIAL ORIENTATION OF LIQUID CRYSTAL (RUBBING) R
26
12
XI
21
17
16
3
27
313
XI
12
21
3
26
5
11
9
10

FIG.11

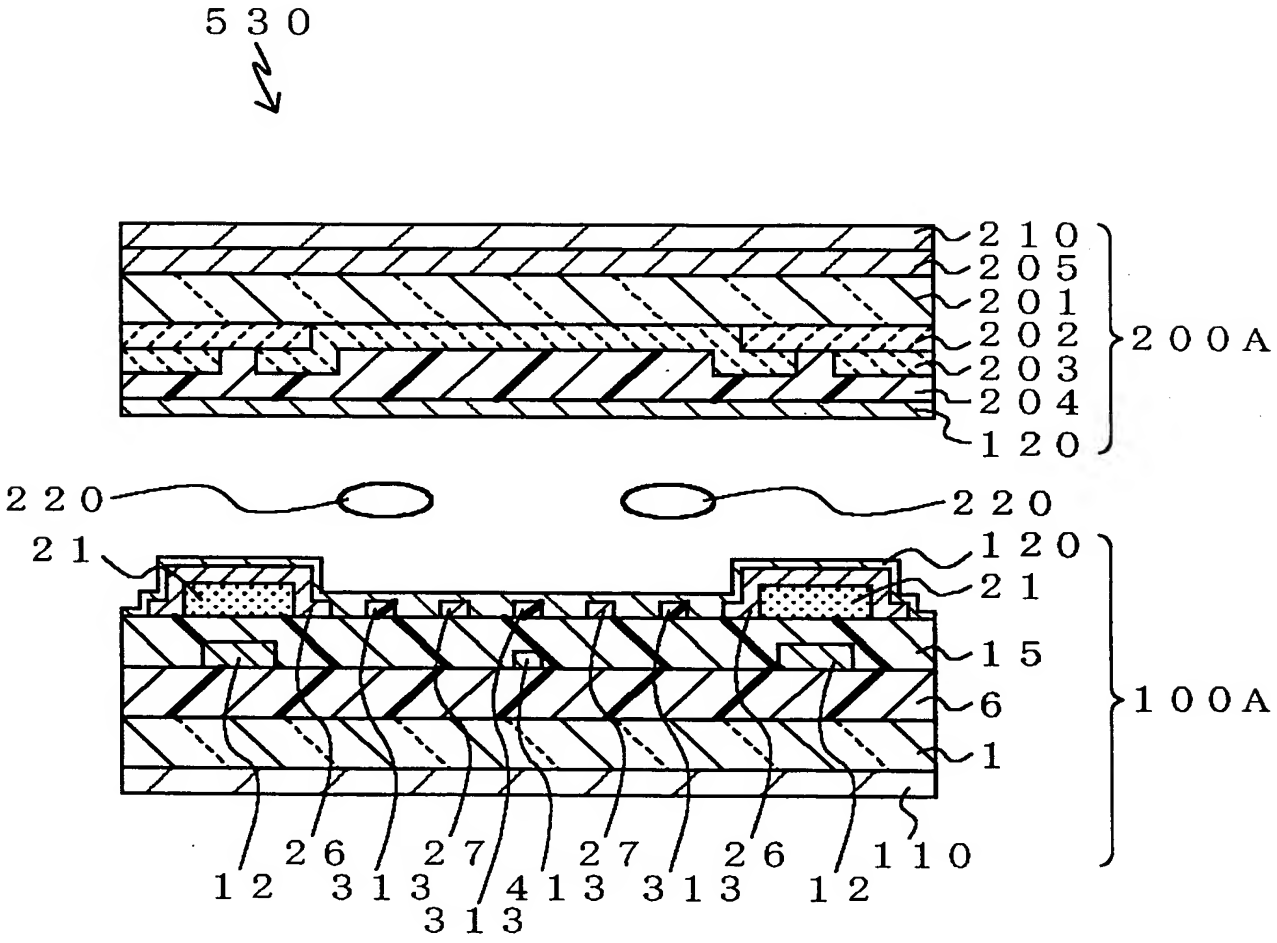

530
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
26
27
27
26
110
12
313
413
313
12
313

FIG.12

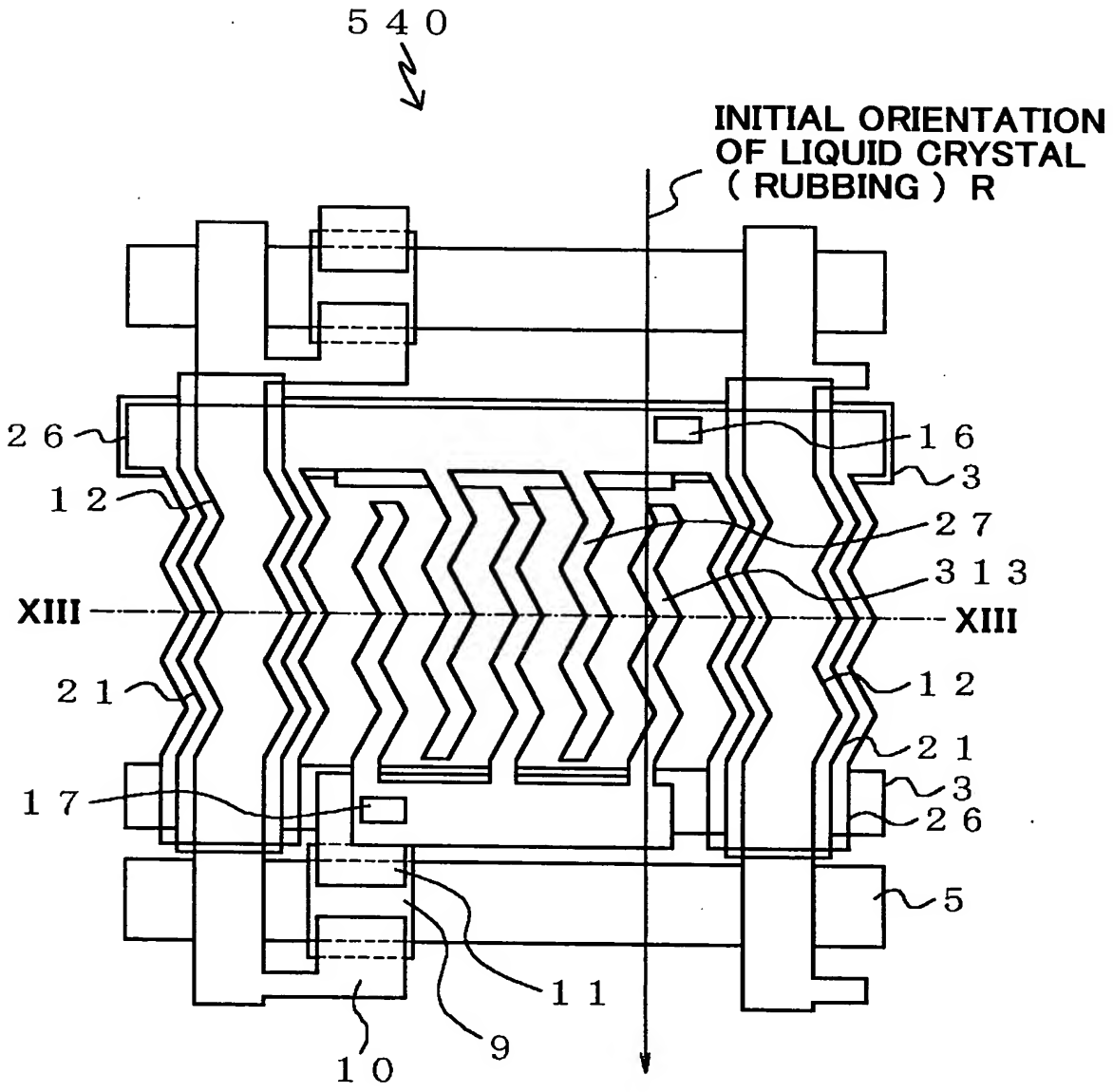

540
INITIAL ORIENTATION
OF LIQUID CRYSTAL
(RUBBING) R
26
12
XIII
21
17
16
3
27
313
XIII
12
21
3
26
5
11
9
10

FIG.13

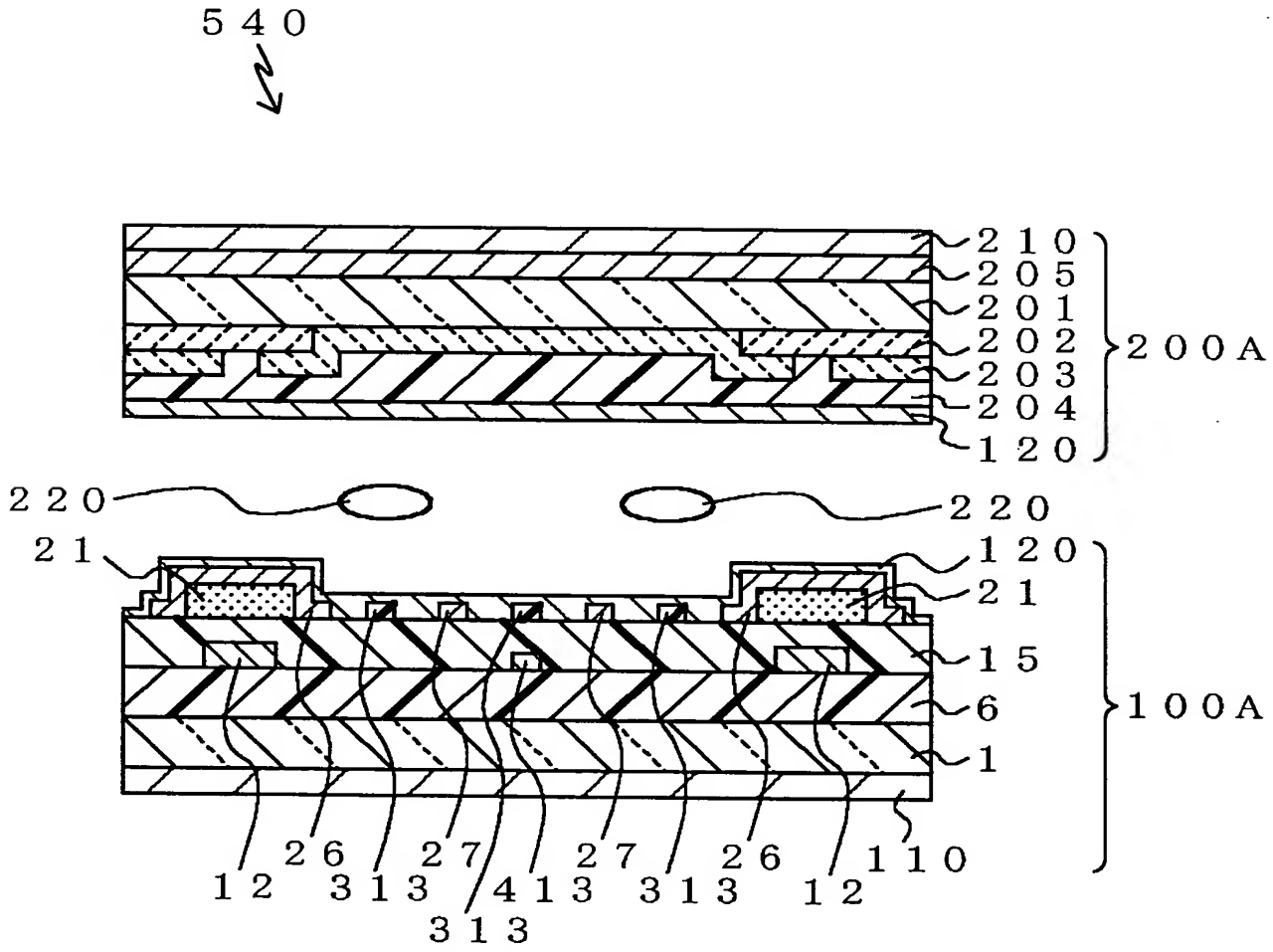

540
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
26
27
27
26
110
12
313
413
313
313
12

FIG.14

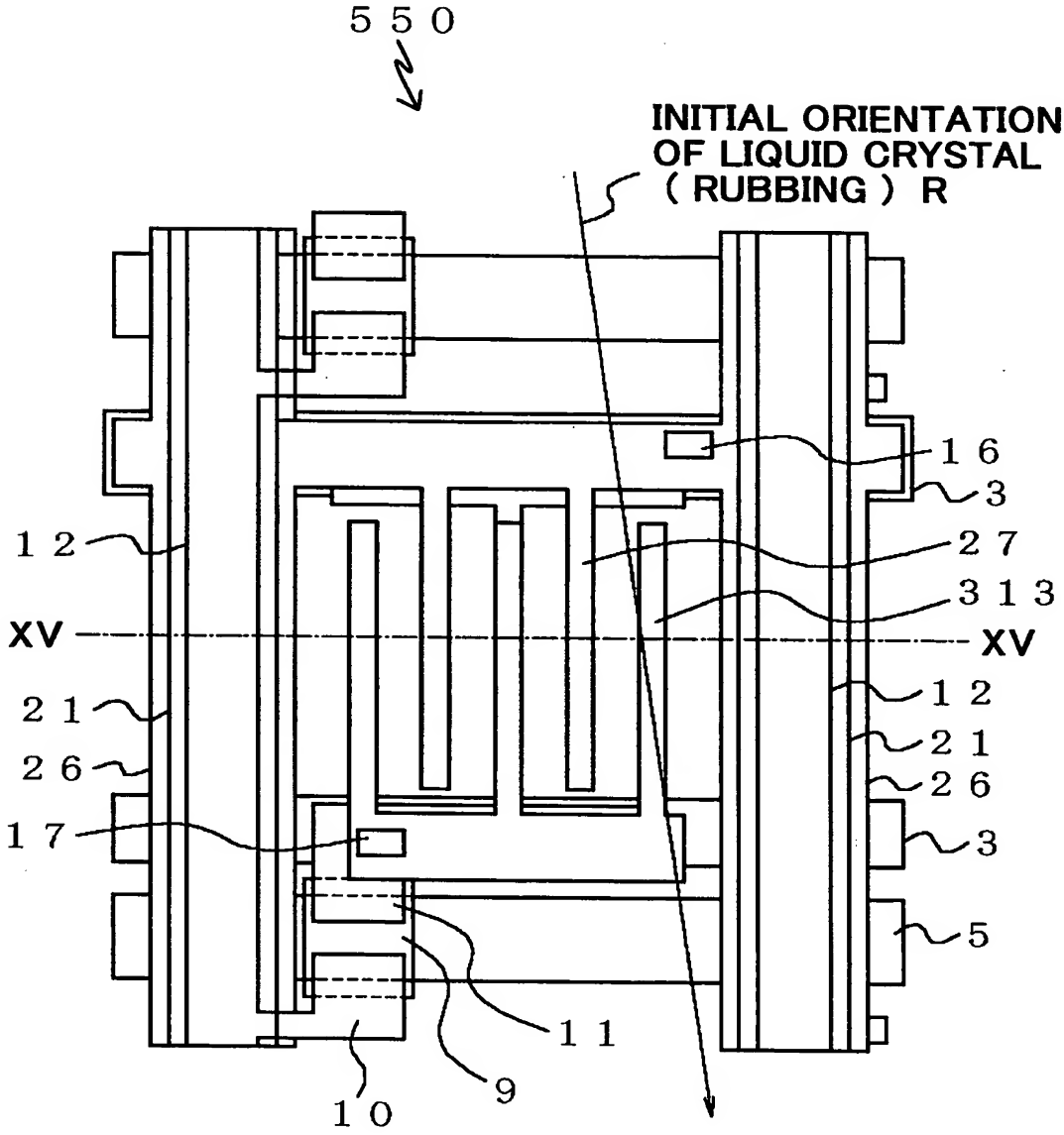

550
INITIAL ORIENTATION
OF LIQUID CRYSTAL
(RUBBING) R
16
3
12
27
313
XV
XV
12
21
21
26
26
17
3
5
11
9
10

FIG.15

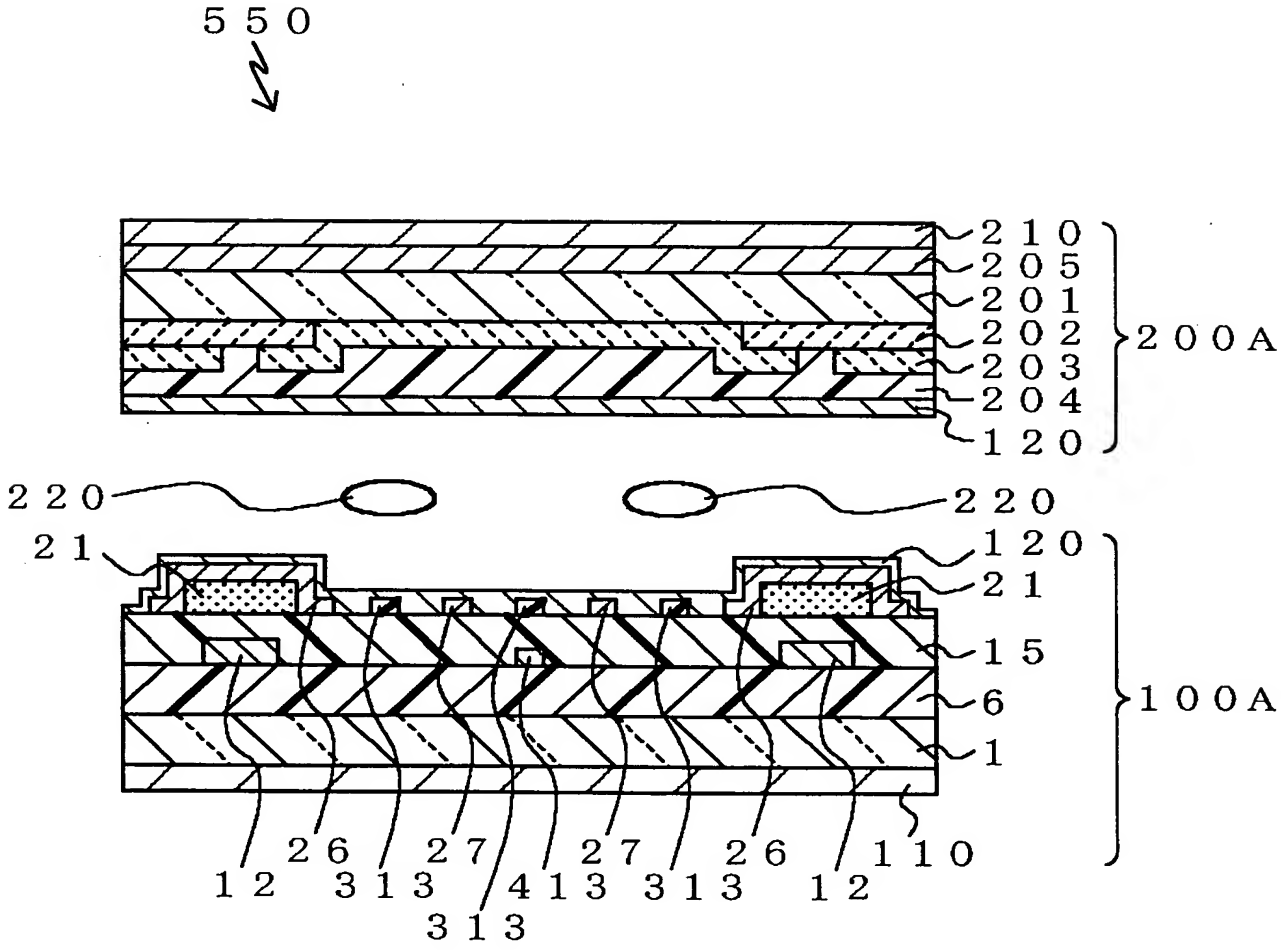

550
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
12
26
313
27
413
27
313
26
12
110
313

FIG.16A

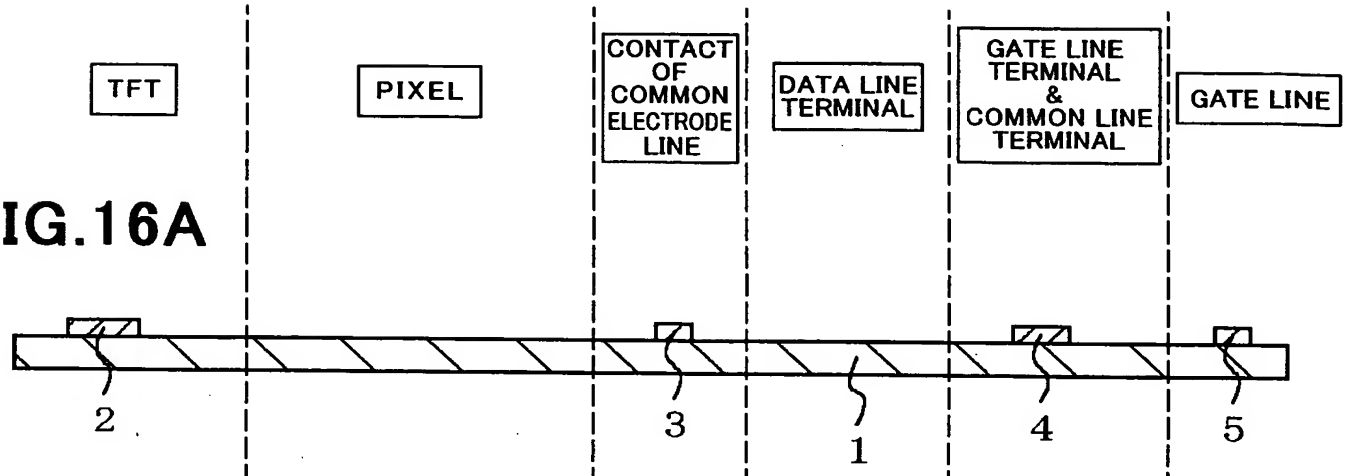


FIG.16B

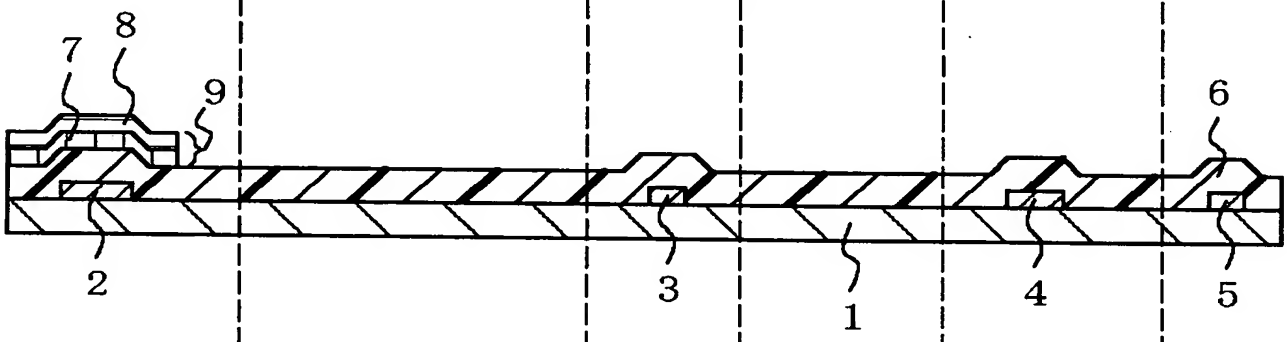


FIG.16C

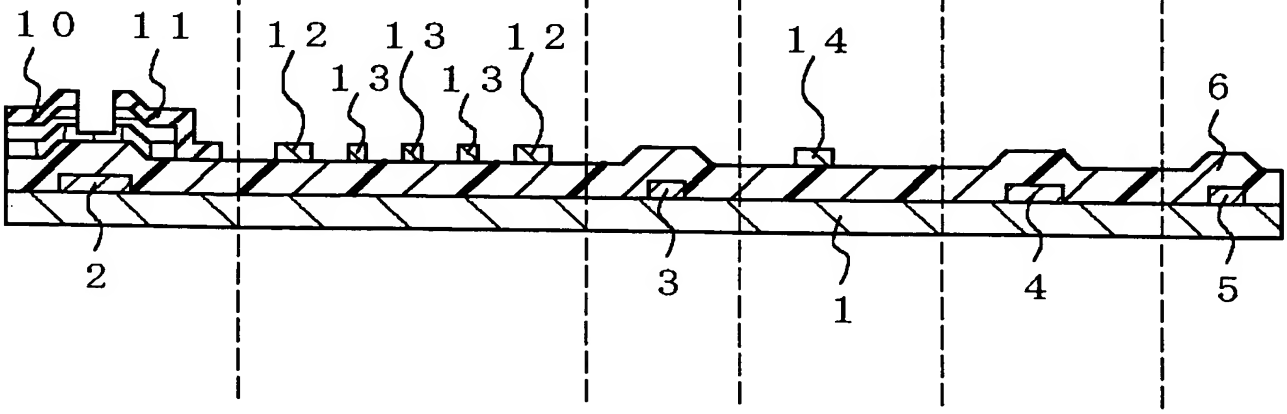


FIG.16D

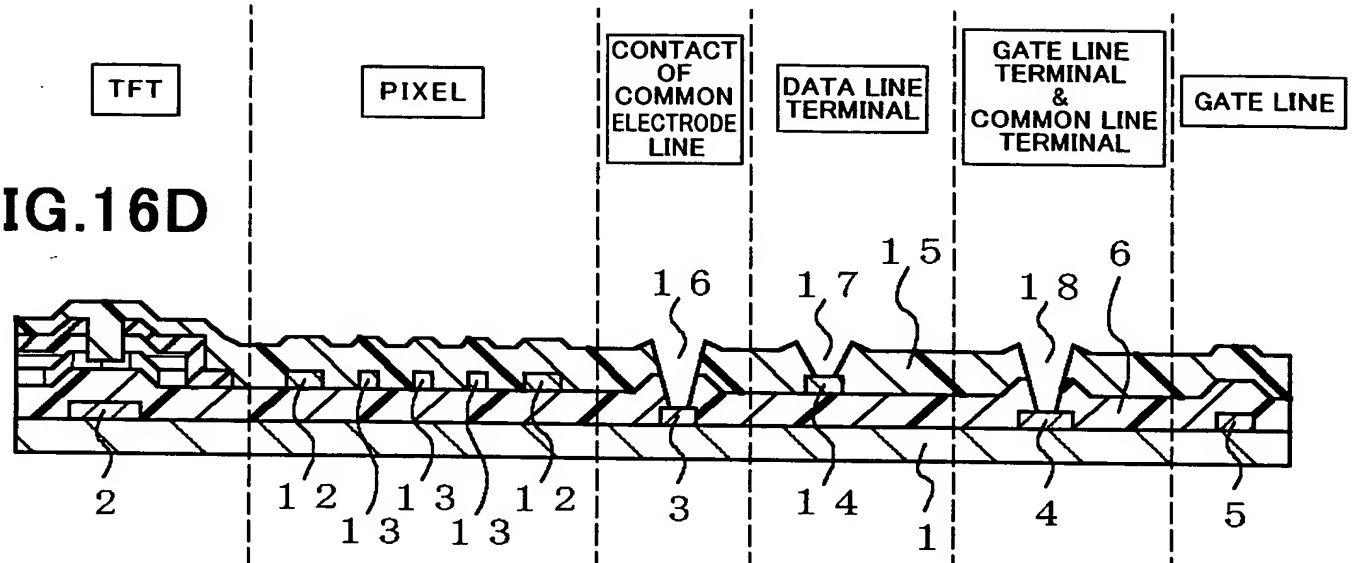


FIG.16E

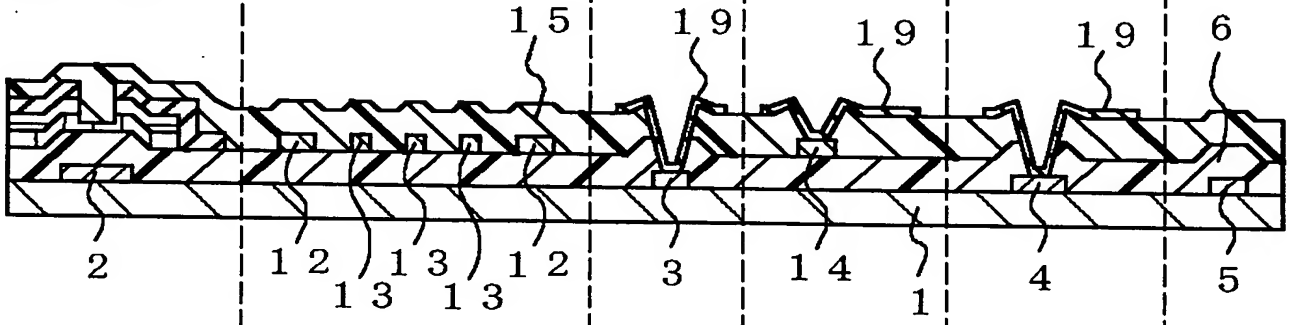


FIG.16F

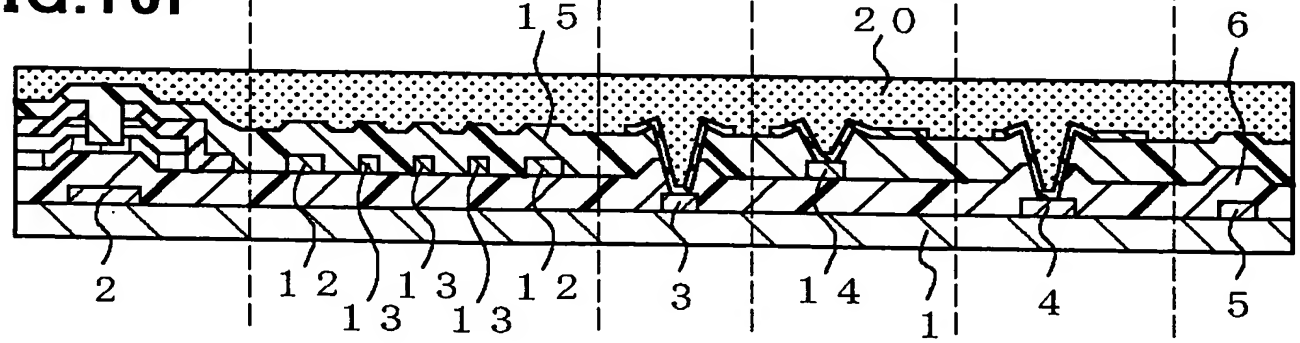


FIG.16G

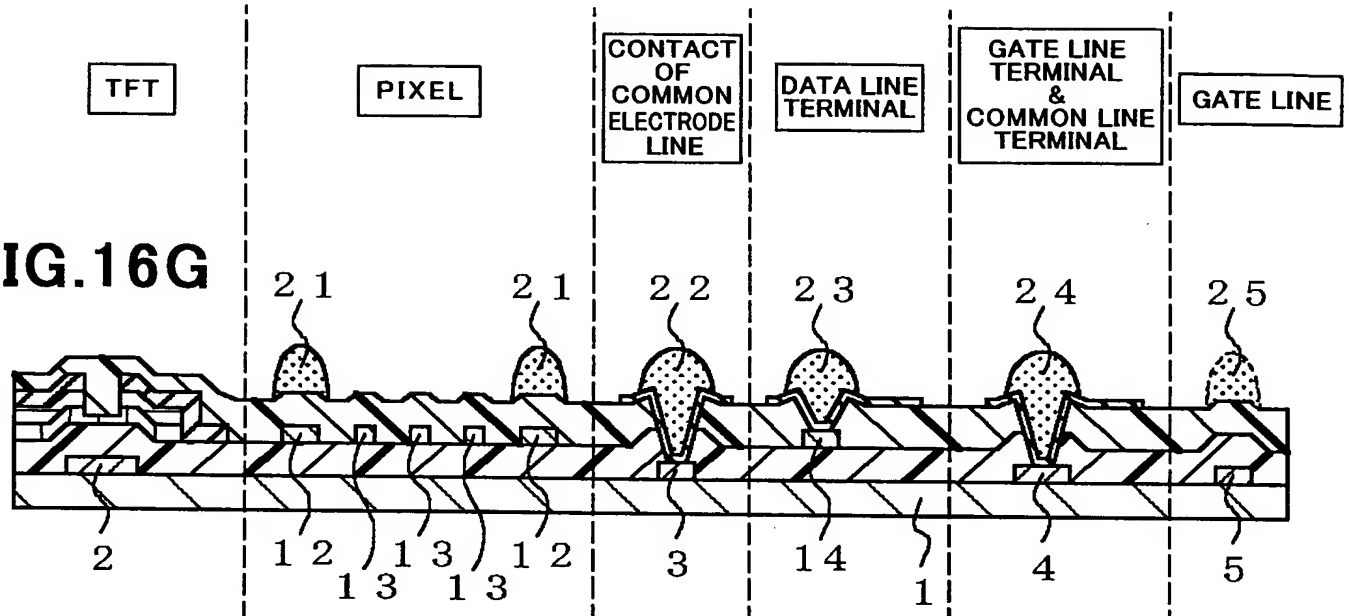


FIG.16H

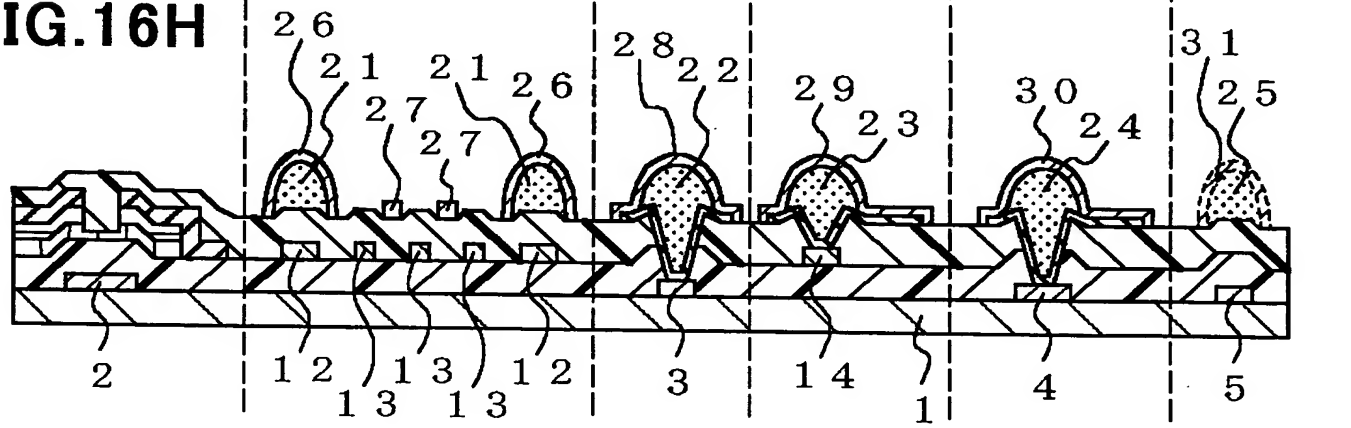


FIG.17A

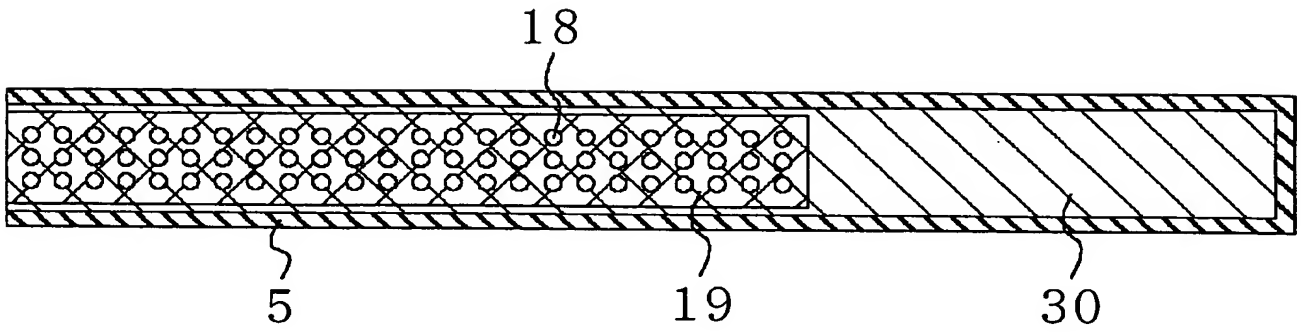


FIG.17B

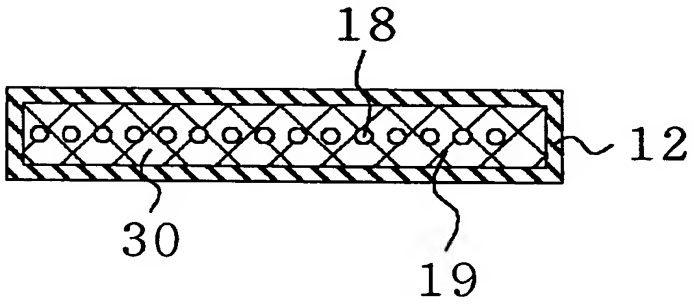


FIG.18

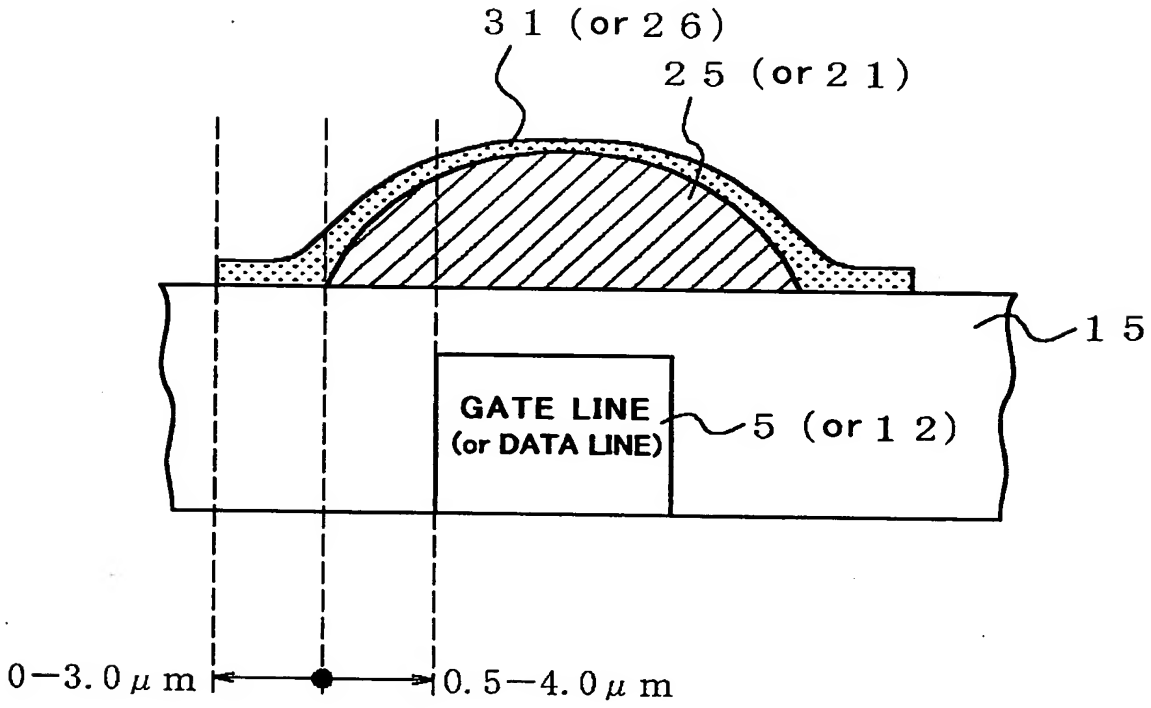


FIG.19

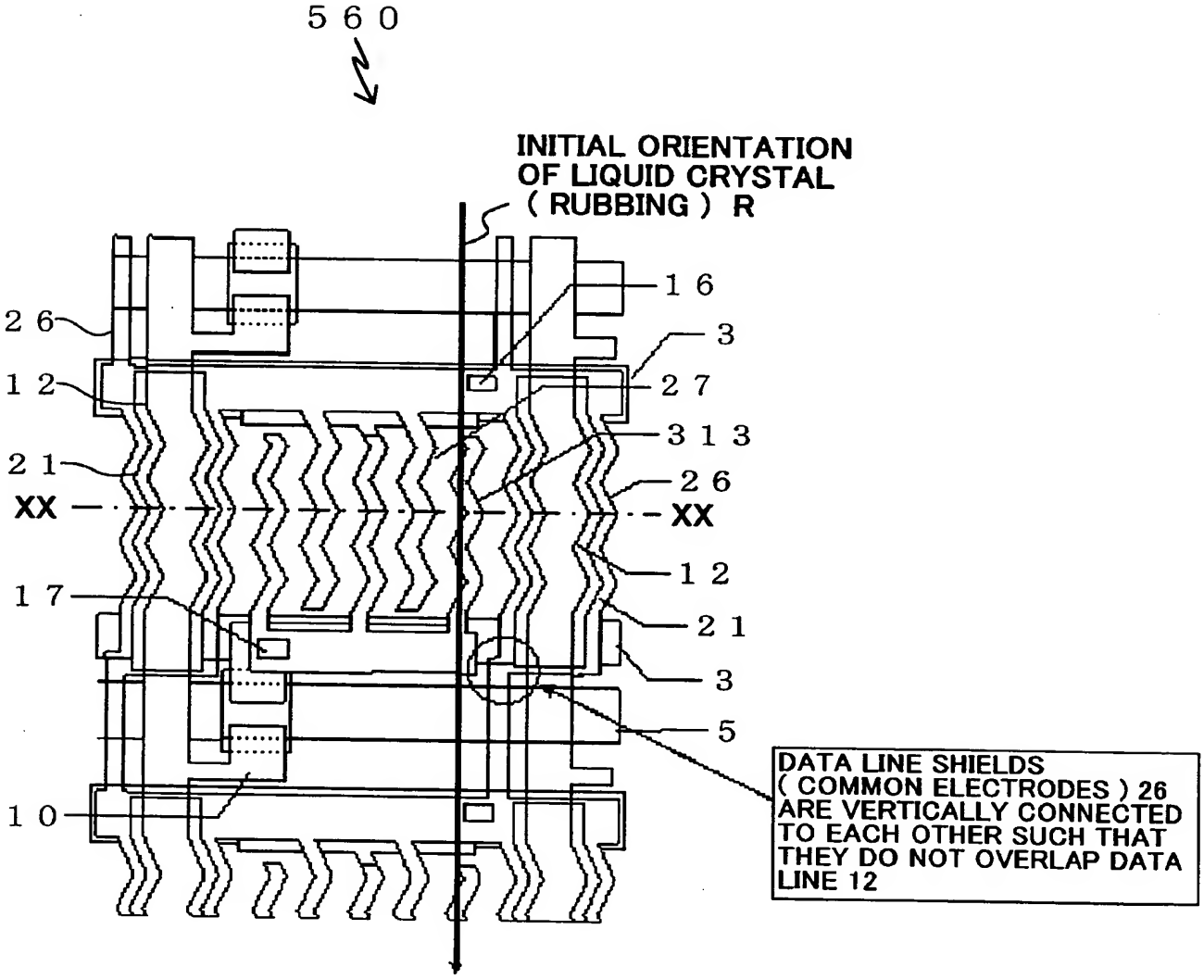

560
INITIAL ORIENTATION OF LIQUID CRYSTAL (RUBBING) R
16
3
27
313
26
XX
XX
12
21
3
5
26
12
17
10
DATA LINE SHIELDS (COMMON ELECTRODES) 26 ARE VERTICALLY CONNECTED TO EACH OTHER SUCH THAT THEY DO NOT OVERLAP DATA LINE 12

FIG.20

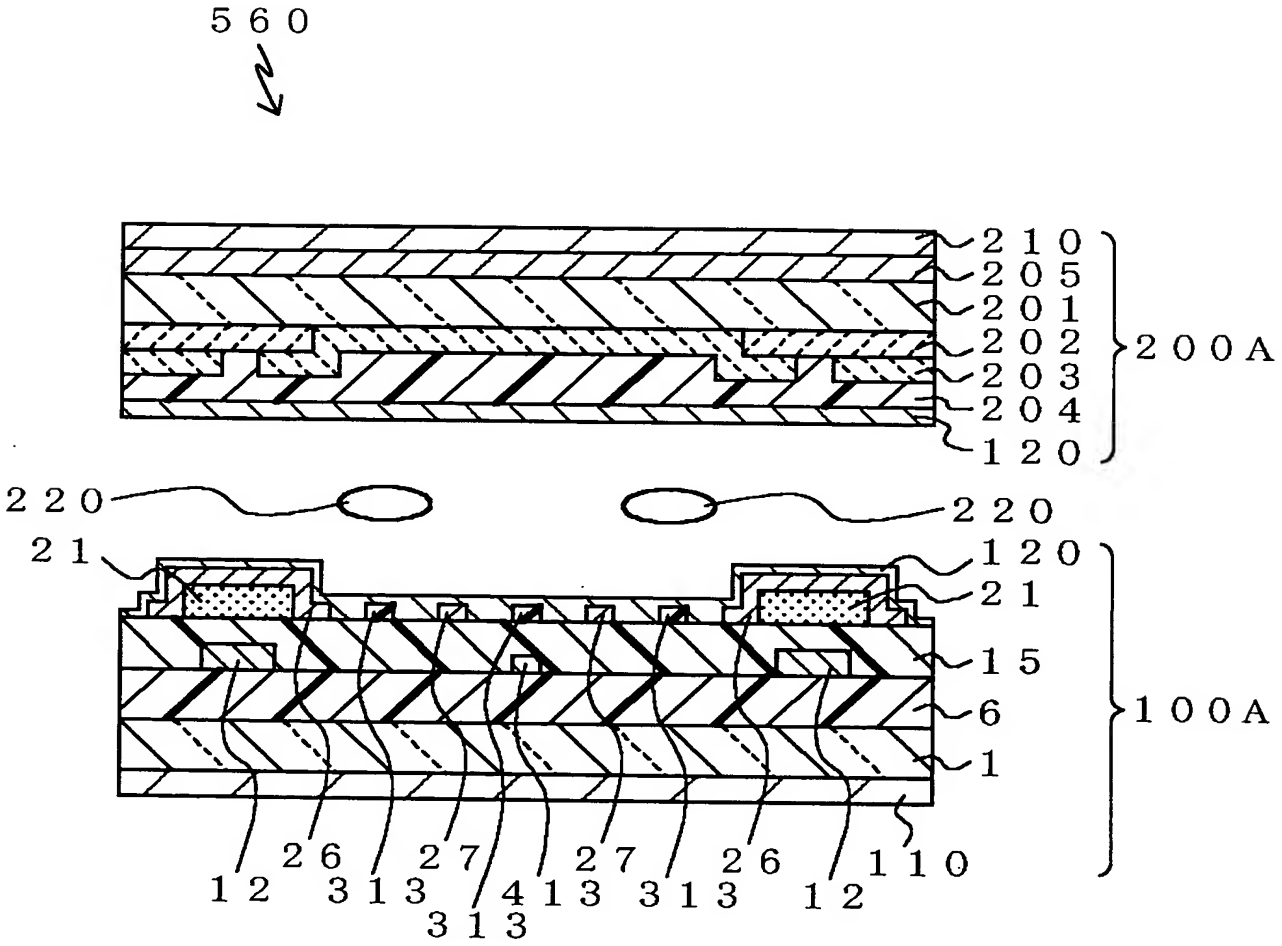

560
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
26
27
27
26
110
12
313
413
313
313
12
313

FIG.21A

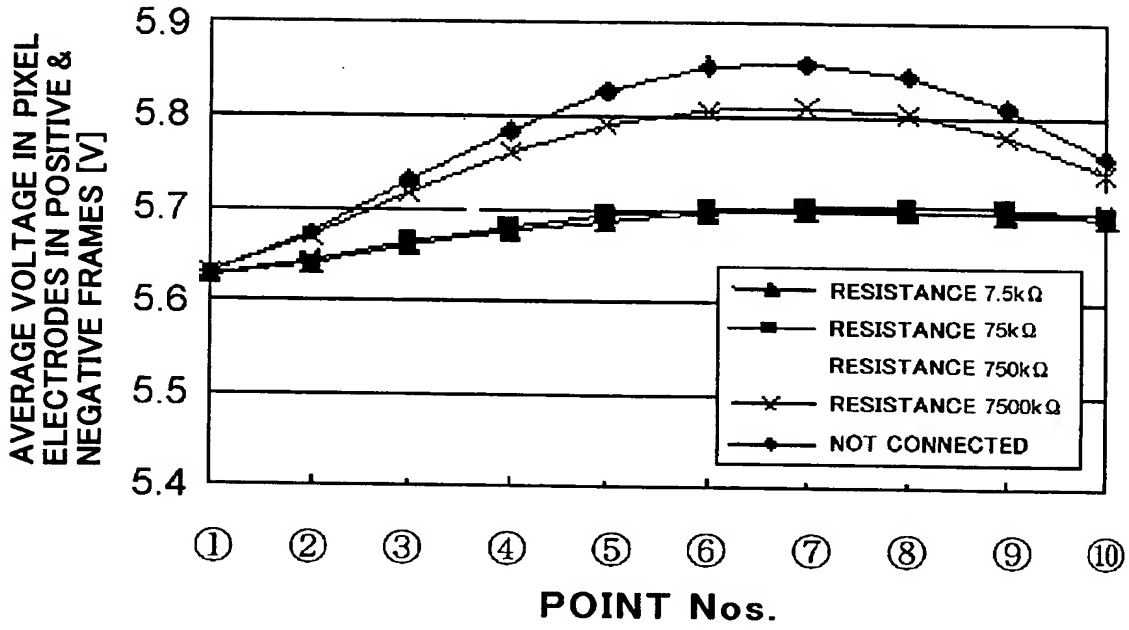


FIG.21B

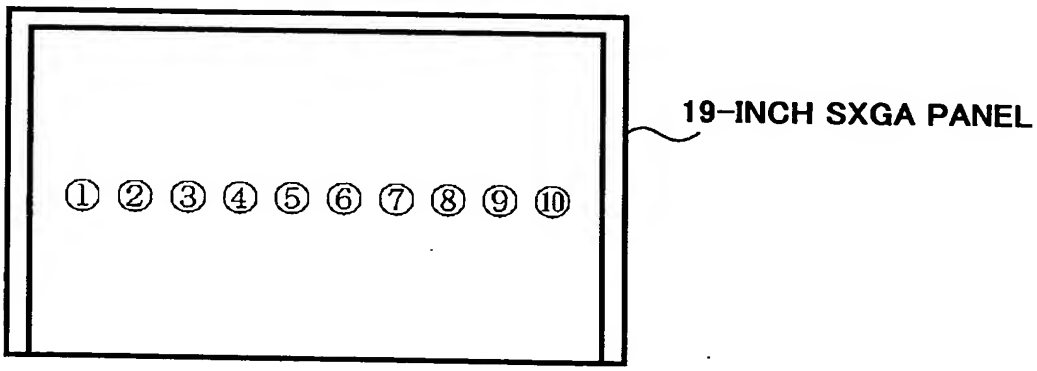


FIG.22

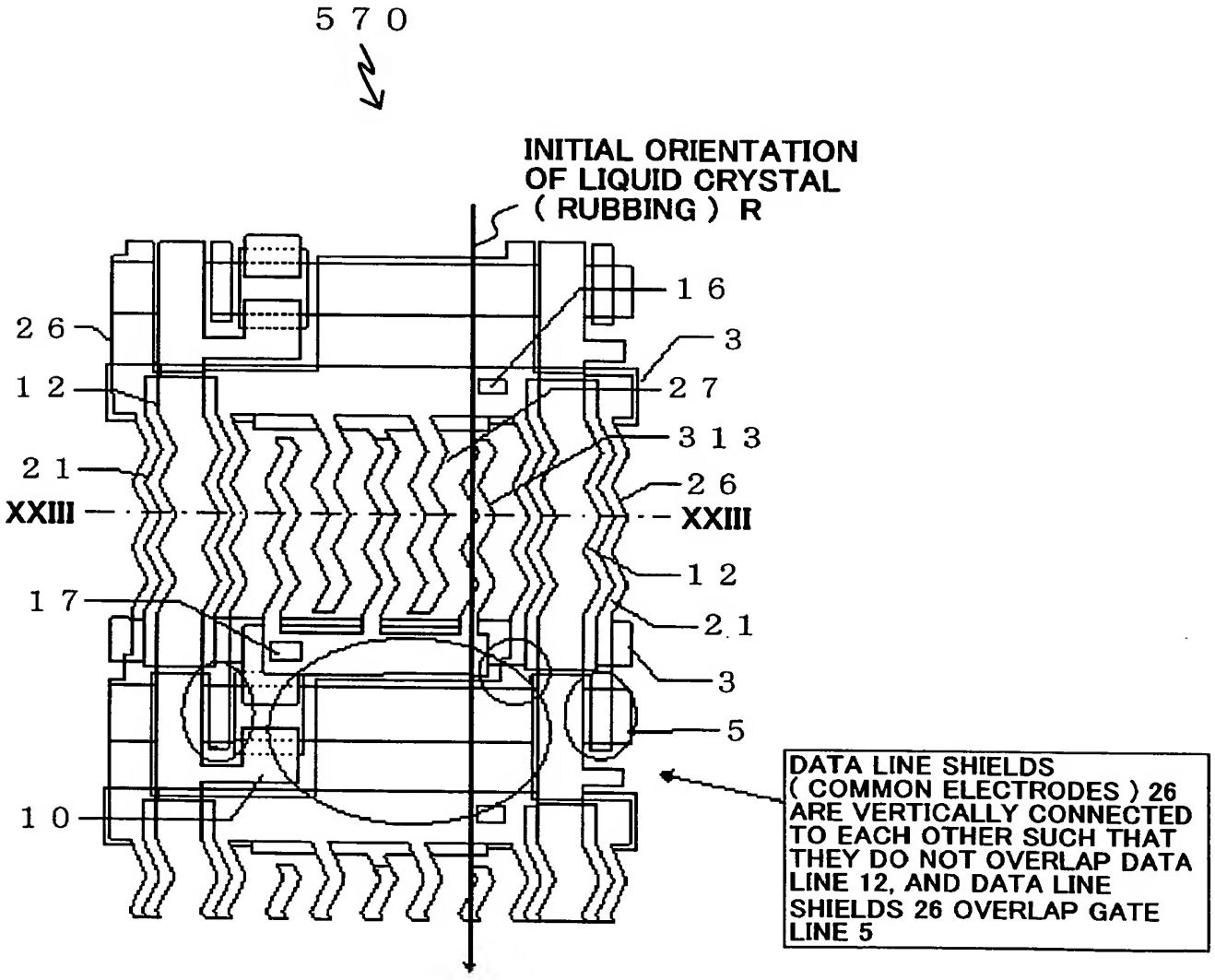

570
INITIAL ORIENTATION OF LIQUID CRYSTAL (RUBBING) R
16
3
27
313
26
XXIII
XXIII
12
21
3
5
26
12
21
17
10
DATA LINE SHIELDS (COMMON ELECTRODES) 26 ARE VERTICALLY CONNECTED TO EACH OTHER SUCH THAT THEY DO NOT OVERLAP DATA LINE 12, AND DATA LINE SHIELDS 26 OVERLAP GATE LINE 5

FIG.23

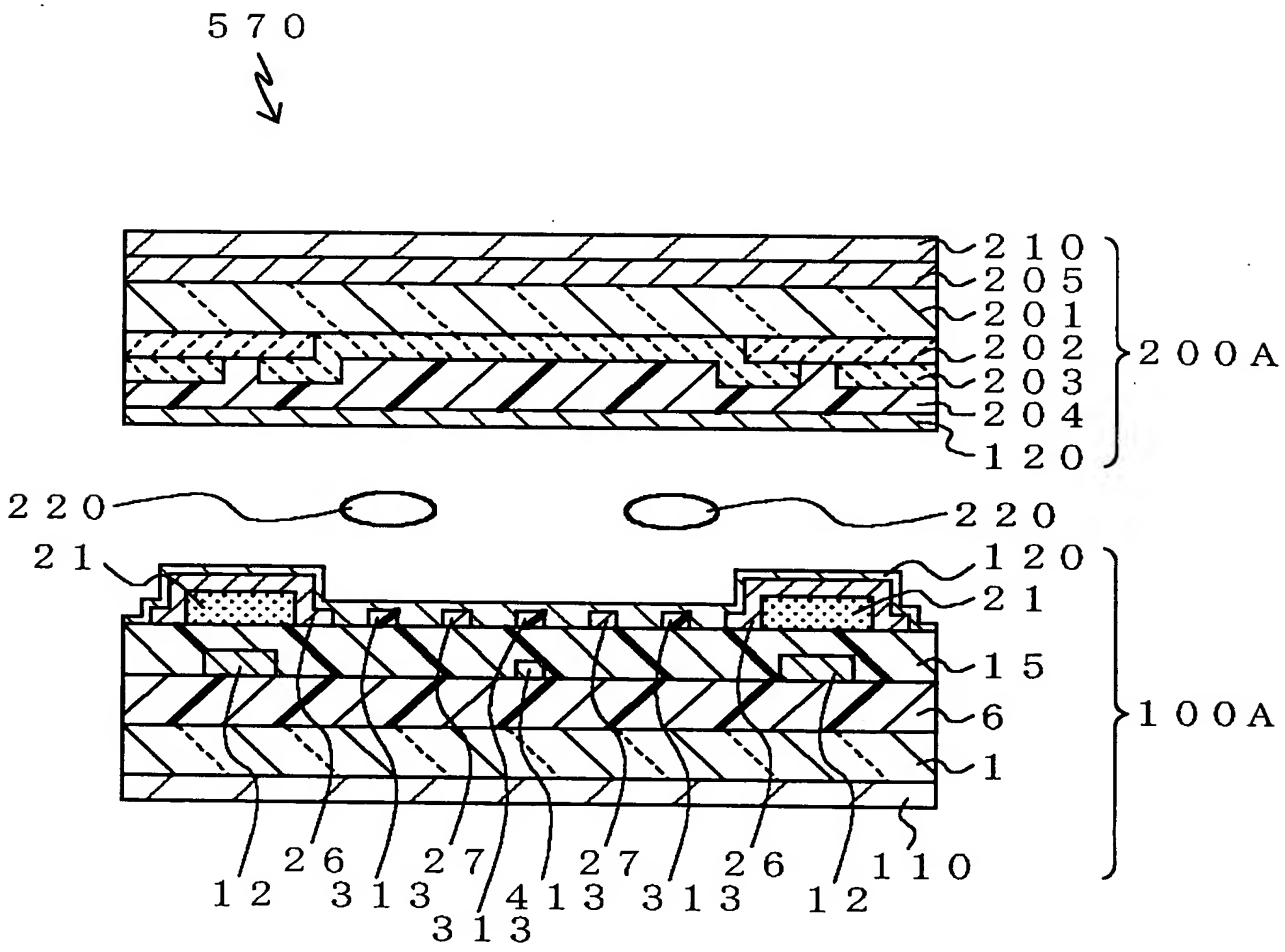

570
210
205
201
202
203
204
120
200A
220
220
21
120
21
15
6
1
100A
26
313
27
413
27
313
26
12
110
12
313

FIG.24

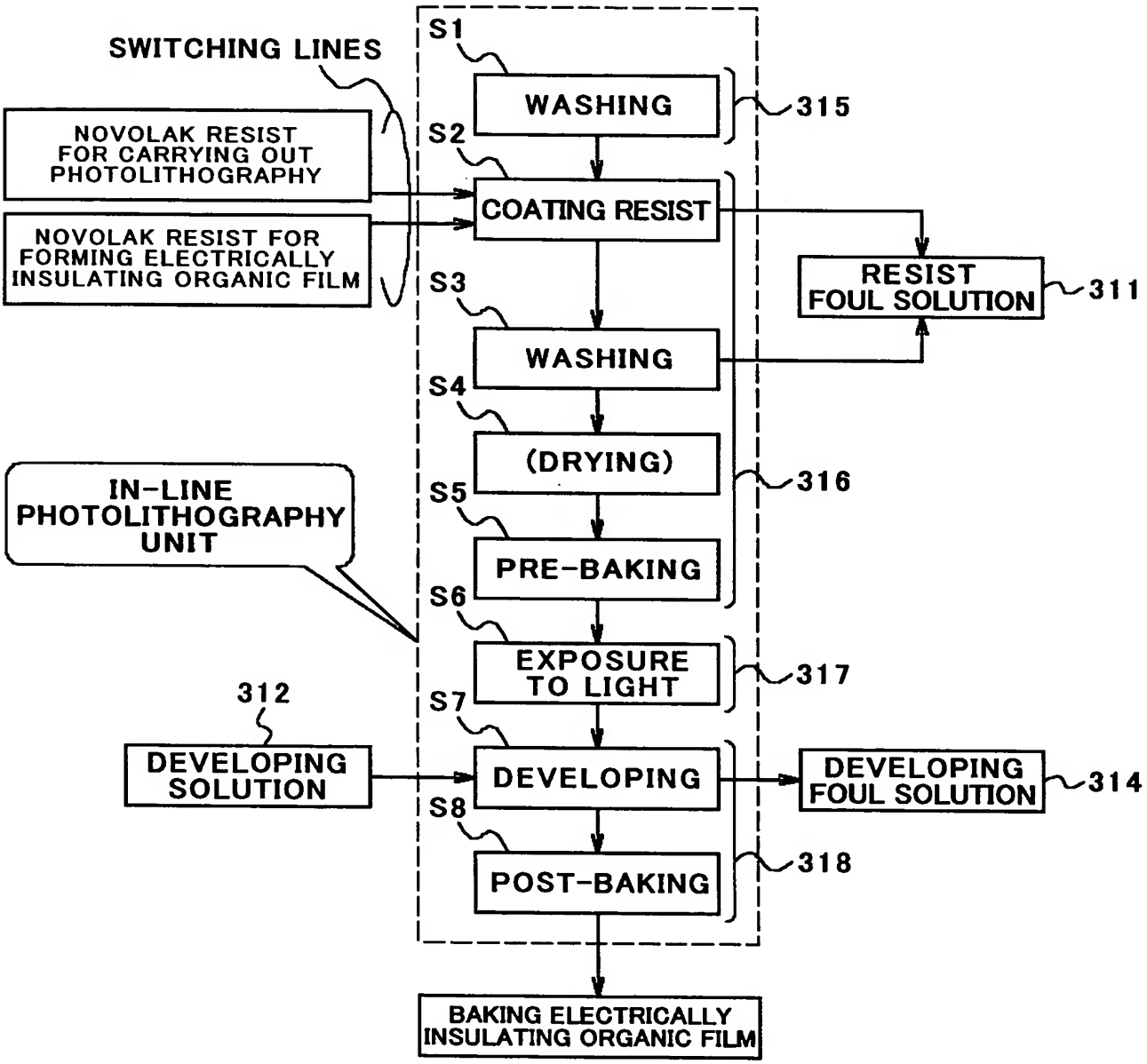

SWITCHING LINES
NOVOLAK RESIST FOR CARRYING OUT PHOTOLITHOGRAPHY
NOVOLAK RESIST FOR FORMING ELECTRICALLY INSULATING ORGANIC FILM
IN-LINE PHOTOLITHOGRAPHY UNIT
312
DEVELOPING SOLUTION
S1
WASHING
315
S2
COATING RESIST
S3
WASHING
RESIST FOUL SOLUTION
311
S4
(DRYING)
316
S5
PRE-BAKING
S6
EXPOSURE TO LIGHT
317
S7
DEVELOPING
DEVELOPING FOUL SOLUTION
314
S8
POST-BAKING
318
BAKING ELECTRICALLY INSULATING ORGANIC FILM

FIG.25

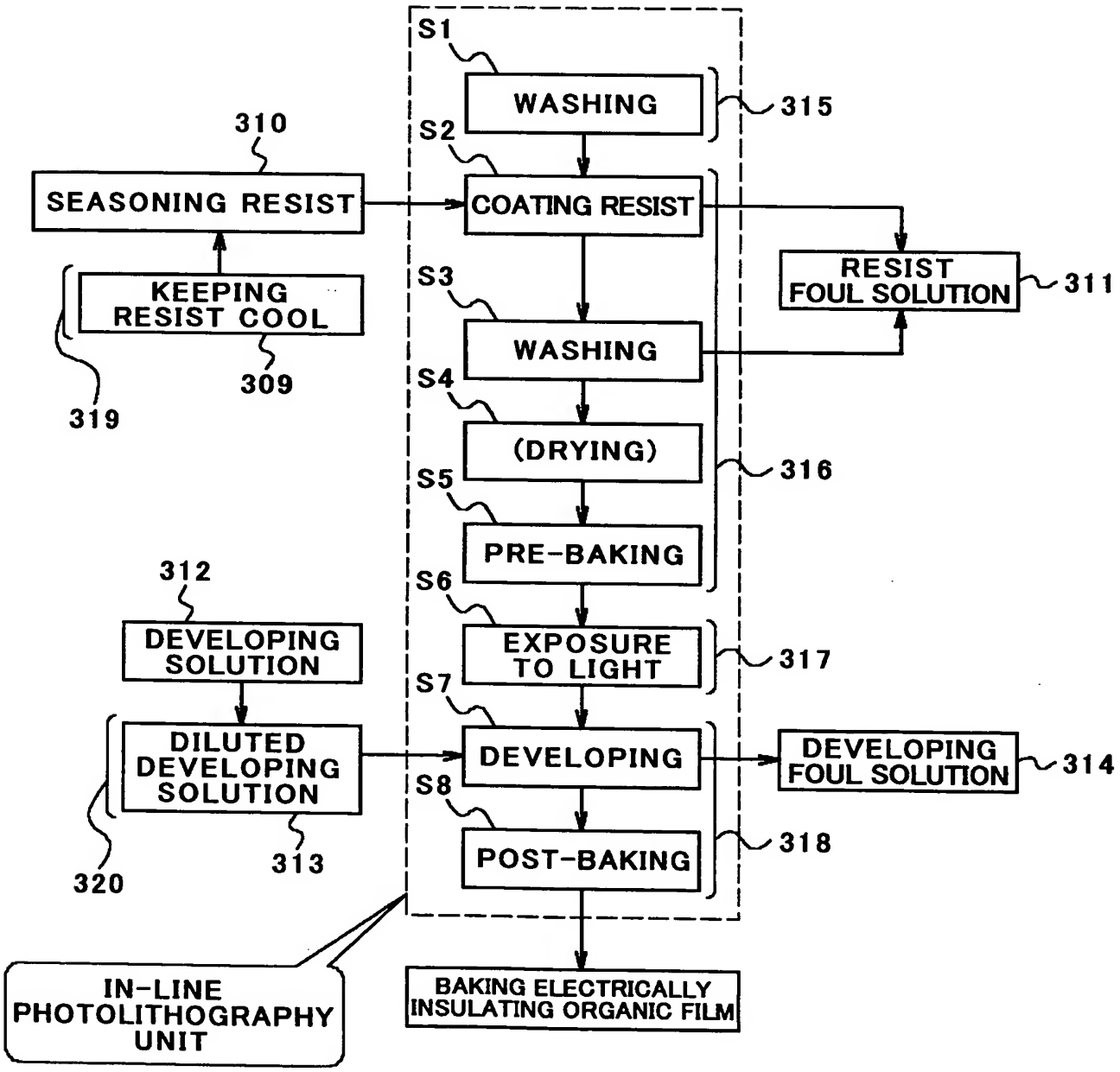

S1
WASHING
315
S2
COATING RESIST
310
SEASONING RESIST
KEEPING RESIST COOL
309
319
RESIST FOUL SOLUTION
311
S3
WASHING
S4
(DRYING)
316
S5
PRE-BAKING
S6
EXPOSURE TO LIGHT
317
312
DEVELOPING SOLUTION
S7
DILUTED DEVELOPING SOLUTION
320
313
DEVELOPING
DEVELOPING FOUL SOLUTION
314
S8
POST-BAKING
318
IN-LINE PHOTOLITHOGRAPHY UNIT
BAKING ELECTRICALLY INSULATING ORGANIC FILM

FIG.26

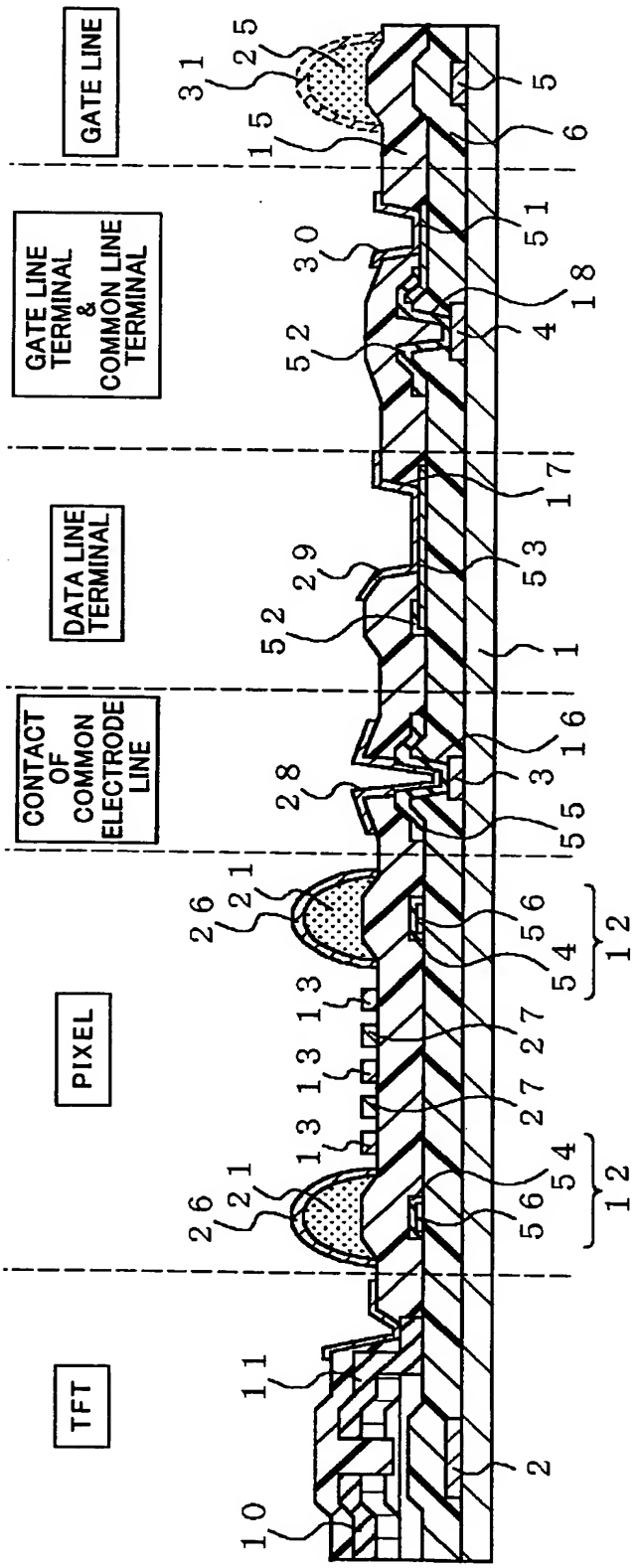

GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT

FIG.27

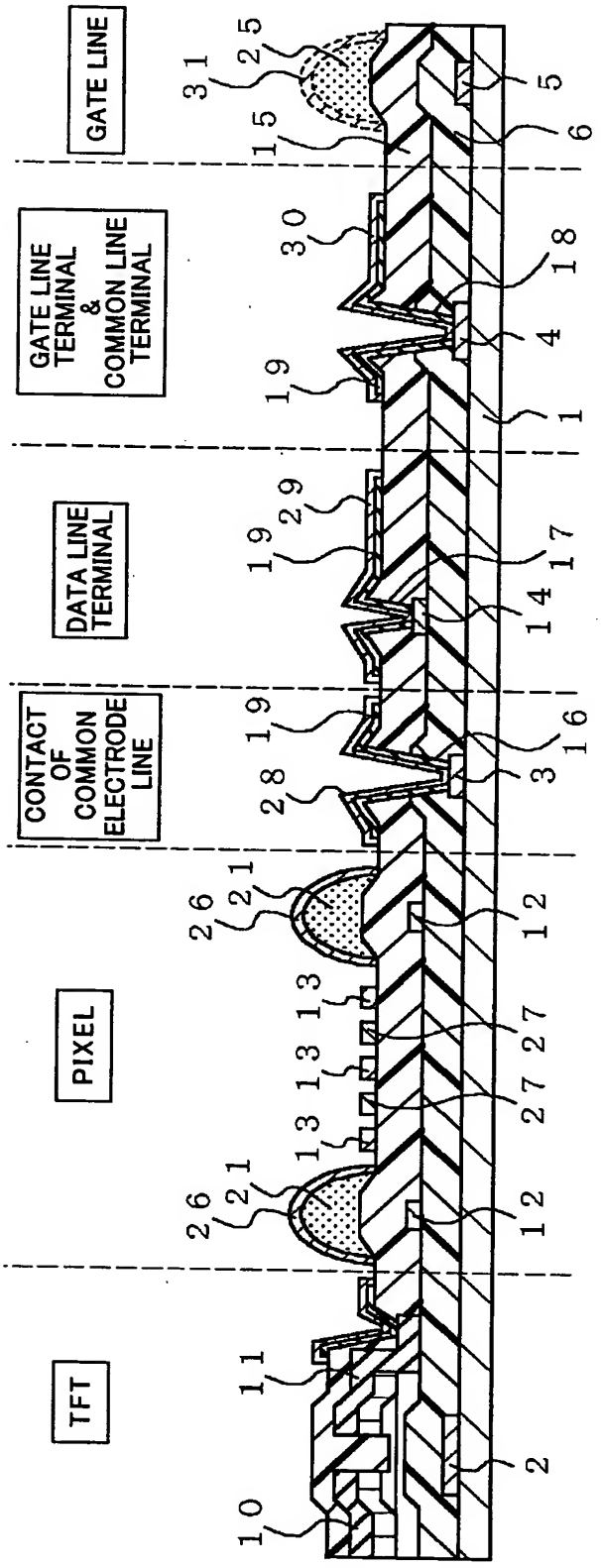

GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT
31
25
15
5
6
30
18
4
19
1
29
19
17
14
19
16
3
28
26
21
12
13
13
27
13
27
13
26
21
12
11
10
2

FIG.28

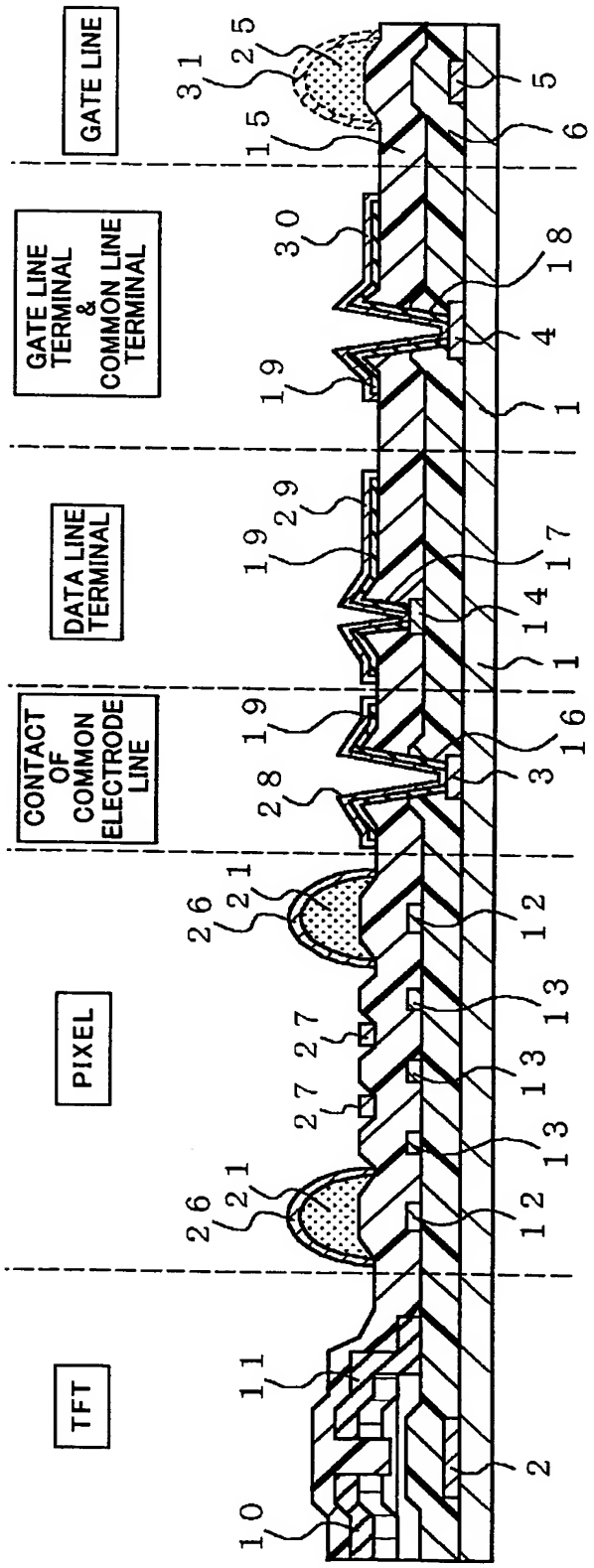

GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT

FIG.29

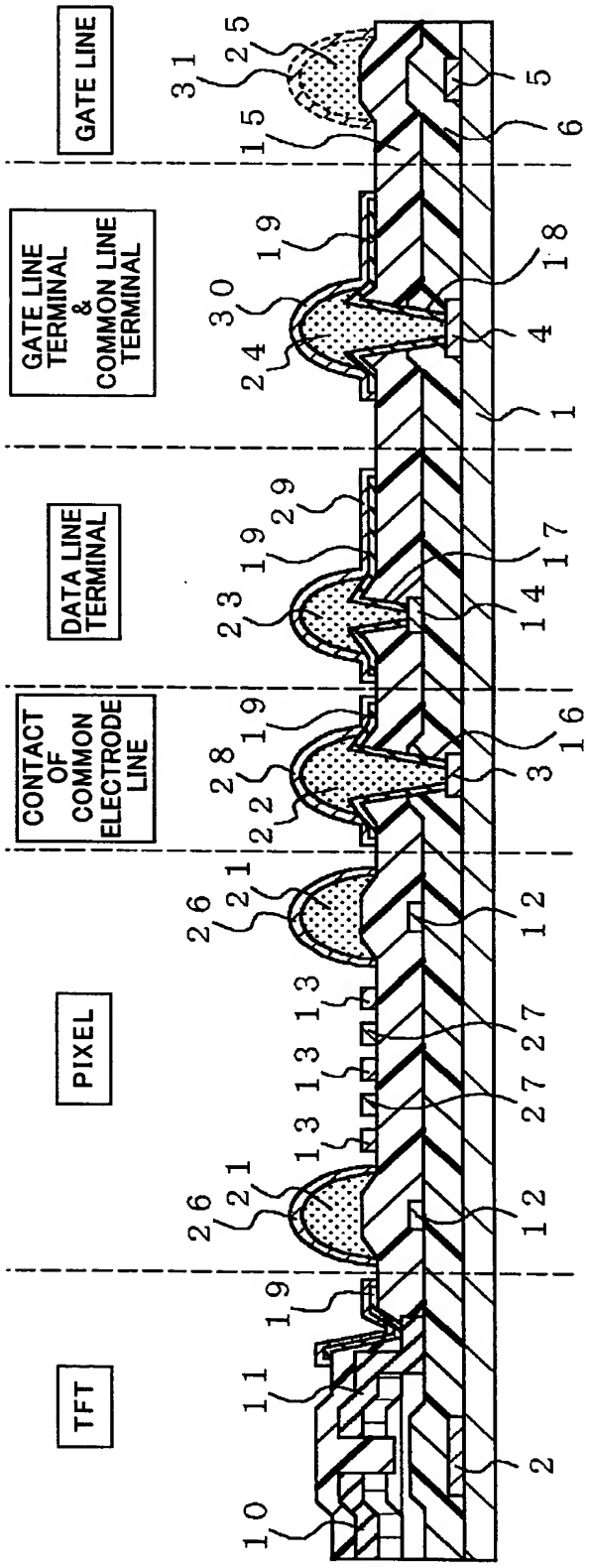

GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT

FIG.30

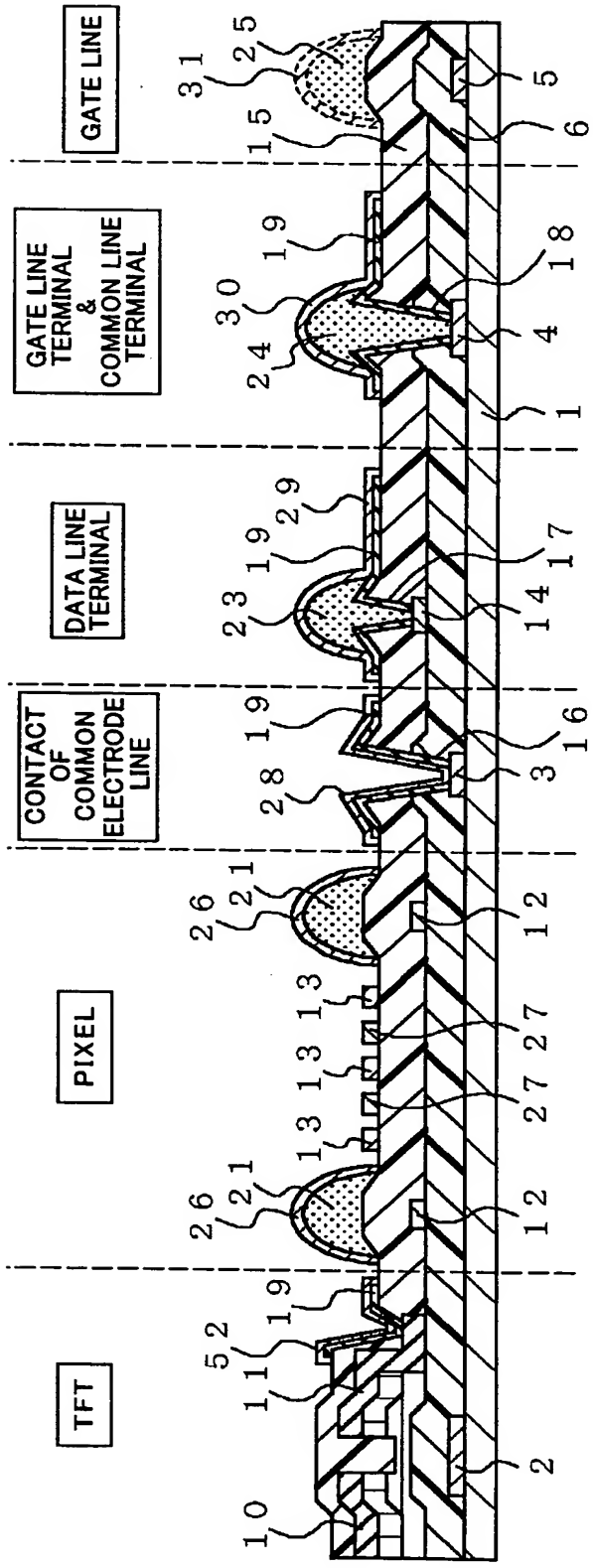

GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT

FIG.31

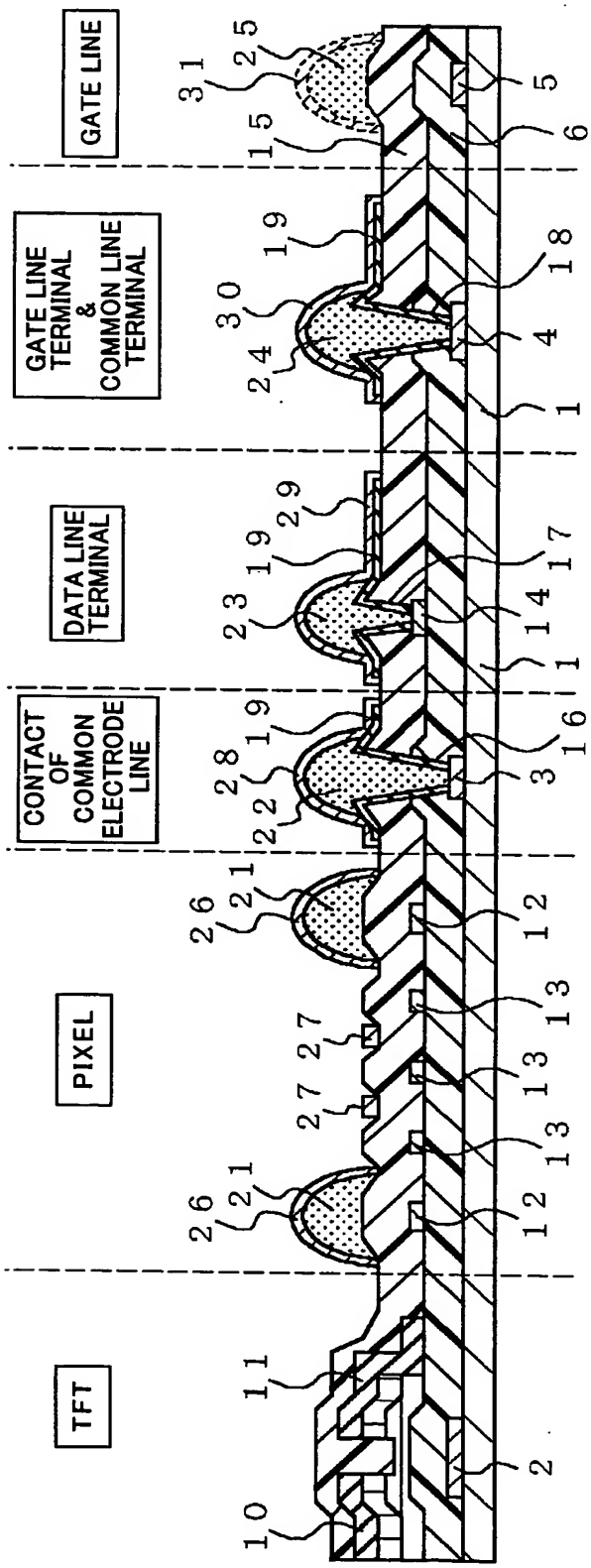

GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT

FIG.32

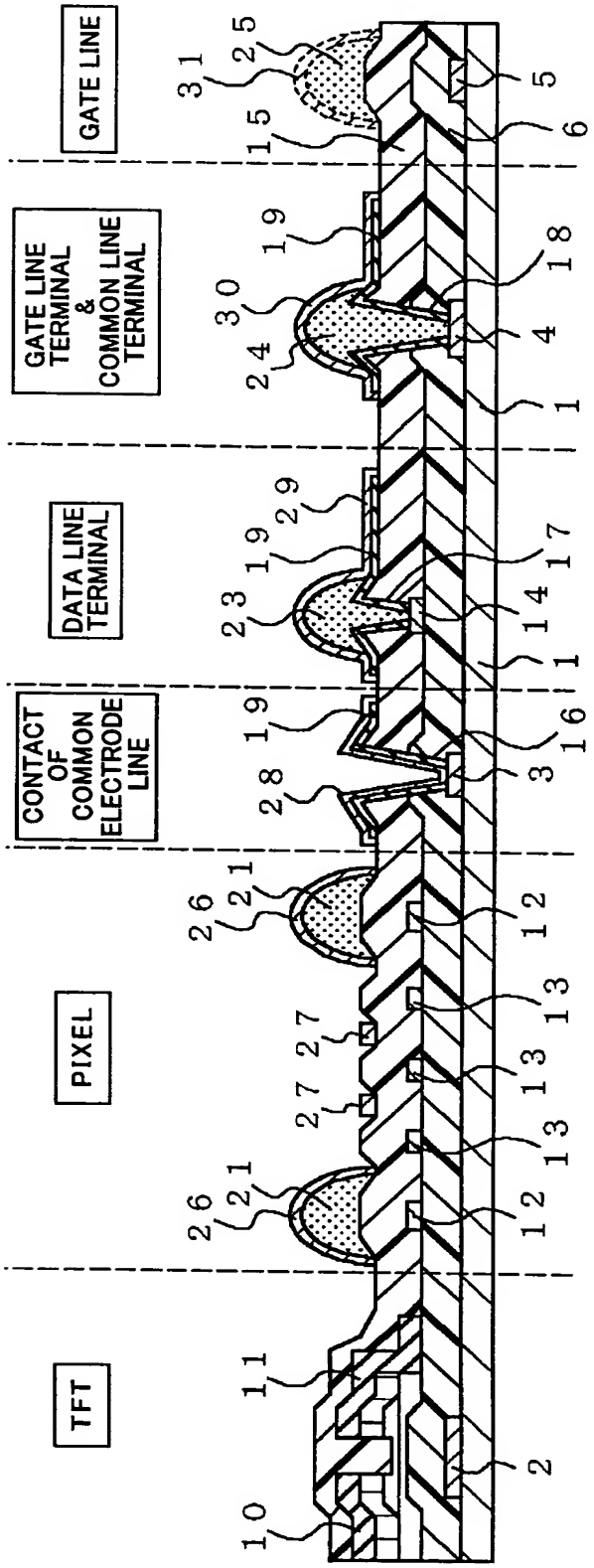
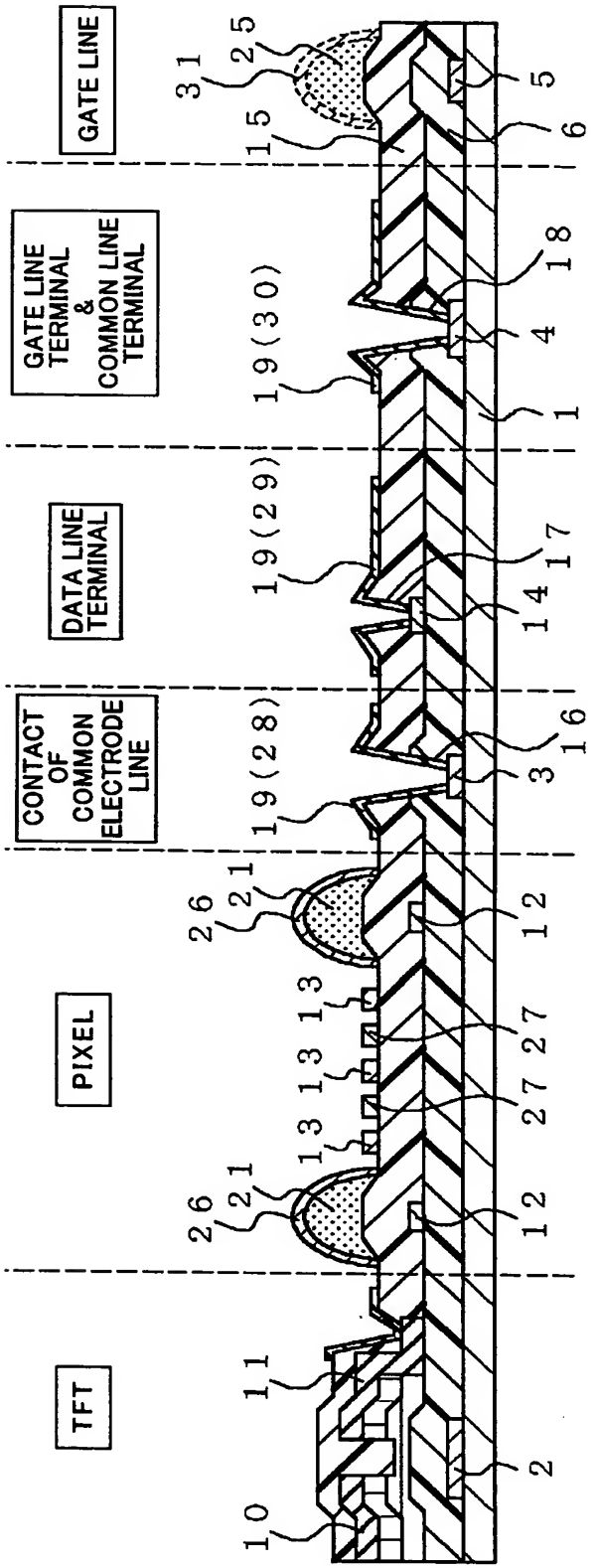

GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT

FIG.33


GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
PIXEL
TFT
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15
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6
18
19(30)
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19(29)
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14
19(28)
16
3
26
21
12
13
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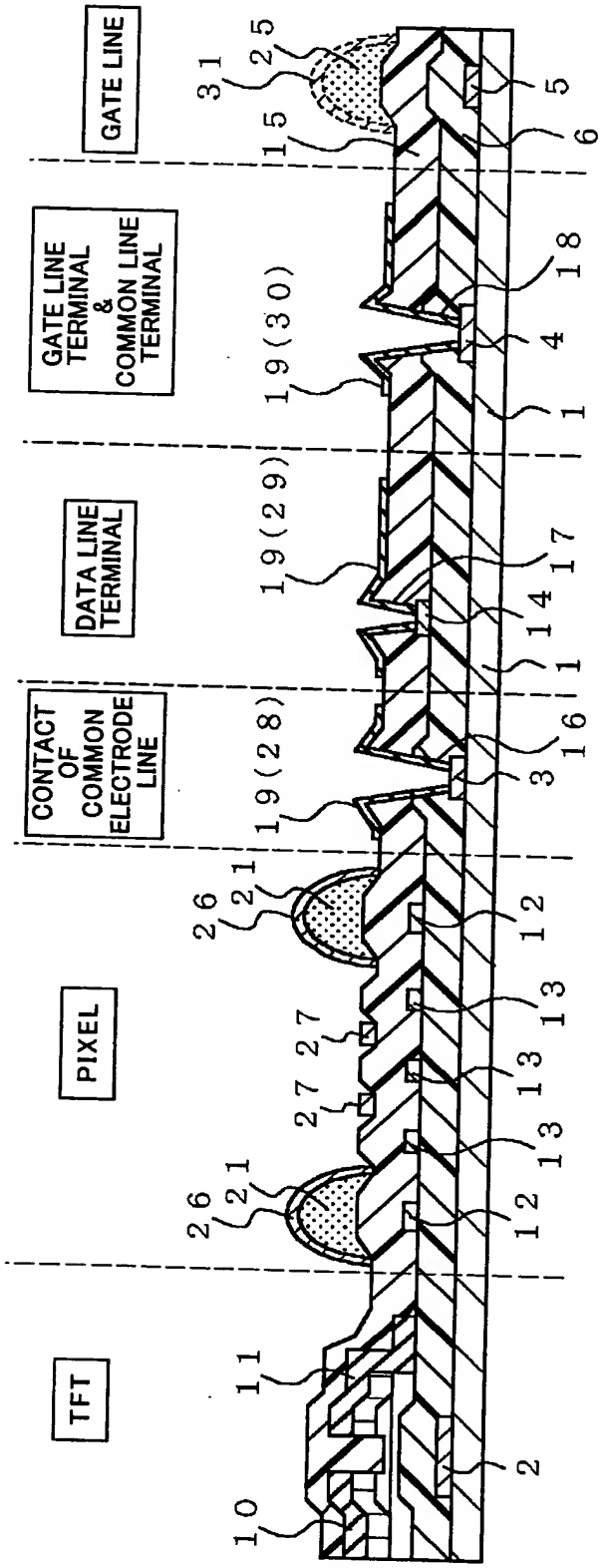
10
11
2

FIG.34


GATE LINE
GATE LINE TERMINAL & COMMON LINE TERMINAL
DATA LINE TERMINAL
CONTACT OF COMMON ELECTRODE LINE
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